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A BIBLIOGRAPHY OF
AMERICAN NATURAL HISTORY

A Bibliography of American Natural History

The Pioneer Century, 1769-1865

*The Rôle Played by the Scientific Societies; Scientific Journals; Natural
History Museums and Botanic Gardens; State Geological and
Natural History Surveys; Federal Exploring Expeditions*
IN THE RISE AND PROGRESS OF AMERICAN BOTANY, GEOL-
OGY, MINERALOGY, PALEONTOLOGY AND ZOOLOGY

BY

MAX MEISEL, B.S., B.L.S.

Formerly of the Science Division, N. Y. Public Library

VOLUME I

An Annotated Bibliography of the Publications Relating
to the History, Biography and Bibliography of American
Natural History and its Institutions, during Colonial Times
and the Pioneer Century, which have been published up to
1924; with a Classified Subject and Geographic Index;
and a Bibliography of Biographies.

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“It seems too unfortunate, that we should allow the value of the labors of our predecessors to be depreciated, or to refer to the naturalists of the last century as belonging to the unscientific or to the archaic period. It has been frequently said by naturalists that there was no science in America until after the beginning of the present century. This is in one sense true; in another very false. There were then, it is certain, many men equal in capacity, in culture, in enthusiasm, to the naturalists of to-day, who were giving careful attention to the study of precisely the same phenomena of nature. . . . Is it not incumbent upon workers in science to keep green the memory of those whose traditions we have inherited?”

GEORGE BROWN GOODE

TO MY MOTHER

PREFACE

THIS work aims to trace bibliographically the rise and progress of natural history in the United States, from the formation of an active American Philosophical Society at Philadelphia in 1769, to the close of the Civil War in 1865. It purposes to show bibliographically the respective rôles played by the various individual institutions in the development and increase of knowledge in American botany, geology, mineralogy, palaeontology, and zoology, during this period, which may appropriately be called the Pioneer Century of American Natural History.

During this century the pioneers, individually and collectively, laid the foundations for the great achievements in American natural history with which we are so familiar to-day. The five chief and most effective agencies instrumental in the promotion and diffusion of this scientific knowledge were: the (1) Scientific Societies; (2) Scientific Journals; (3) State Geological and Natural History Surveys; (4) Natural History Museums and Botanic Gardens; (5) Federal Exploring Expeditions and Surveys.

In the Table of Contents are to be found the names of over two hundred and thirty (230) of these institutions, which have contributed directly and indirectly, in varying degrees, during the Pioneer Century, to the study and dissemination of natural history knowledge.

The Bibliography aims to record the natural history contents of the publications of nearly ninety societies; of twenty-five journals; of thirty-six state geological and natural history surveys; of fifteen natural history museums and botanic gardens, and of over seventy federal exploring expeditions and surveys.

In the publications of these institutions may be found the beginnings of the now numerous and distinct branches of natural history: mineralogy, botany, geology, palaeontology, embryology, comparative anatomy, physiology, microscopy, anthropology and ethnology, and zoology, with its various subordinate branches, conchology, entomology, herpetology, ichthyology, mammalogy, etc.

The work is divided into two principal parts which are designed briefly to give as follows: Part (A), Bibliographical material pertaining to the Pioneer Century and Colonial Times; Part (B), A Bibliographical Portrait of the Pioneer Century. The latter occupies the major portion of the book. Below the plan and content of each of these parts is given in detail.

PART A (VOLUME I)

This part consists of two sections, purely bibliographical, dealing with the historical, biographical and bibliographical aspects of these periods, with subject and geographic indexes to facilitate ready reference.

(1) An ANNOTATED BIBLIOGRAPHY of the Publications relating to the History, Biography and Bibliography of American Natural History and its Institutions, during Colonial Times and the Pioneer Century, which have been published up to 1924.

This contains over 700 titles, arranged alphabetically by author, with extensive subject and geographic indexes (a) and (b), and aims to include everything of importance in the history, collective biography, and bibliography of the branches of natural history enumerated above. Where titles pertain to institutions treated in this book (in (B)), cross-reference is made to same. Such annotations have been made as would indicate the scope, plan, arrangement and content of the work, unless already so indicated in the title itself. Throughout this work references are made to titles as, *e.g.*, see BECKWITH, under ANNOTATED BIBLIOGRAPHY.

(a) The Classified Subject Index to the Annotated Bibliography. This aims to show at a glance the titles pertaining respectively to the Bibliography, Biography, and History of any of the sciences named above, as *e.g.*, BOTANY: Bibliography; Biography; History. Catch titles, and the dates of the publication of the respective titles, are also given. A special section entitled COLONIAL TIMES comprehends the various titles referring to this period.

(b) The Geographic Index to the Annotated Bibliography. This shows what has been done in a particular community, state, city, etc., during this period, in the different sciences. It also contains dates of publication and catch titles.

(2) A SELECTED BIBLIOGRAPHY OF BIOGRAPHIES AND BIBLIOGRAPHIES of the Principal American Naturalists of the Pioneer Century and of Colonial Times.

This list contains nearly fifteen hundred titles relating to over six hundred names of active workers in one branch or other of natural history. For a number of workers it has been exceedingly difficult to find anything except the briefest notes, and for some others biographical matter does not appear to be readily available.

The compilations contained in both (1) and (2) are the result of a personal examination of the entire American scientific literature, and other likely sources of information. This examination of course yielded material for the various sections of Part (B), which have been incorporated in the appropriate places. I am especially indebted for assistance in this connec-

tion to the Card Catalogue of Biographies of Scientists in the Science and Technology Division of the New York Public Library, and to Dr. J. H. Barnhart's Card Catalogue of Biographies of Botanists. Special mention must be made of the printed catalogue cards of the Library of Congress.

PART B (VOLUMES II AND III)

This part, the principal and most extensive in the book, takes up individually the contributions of those institutions which aided in the development of natural history during this period. For the history of natural history in America during Colonial Times, when there existed no definite organizations for the dissemination of natural history knowledge, see Dr. Goode's excellent essay (see under ANNOTATED BIBLIOGRAPHY: GOODE (1)).

The sections comprising this part of the book are as follows:

(1) THE INSTITUTIONS WHICH HAVE CONTRIBUTED TO THE RISE AND PROGRESS OF AMERICAN NATURAL HISTORY, which were founded or organized between 1769 and 1865, arranged chronologically by their respective dates of foundation.

The order in which these institutions are treated, will be found in the Table of Contents with the corresponding dates of foundation or organization. Over 230 of these institutions are dealt with. The material concerning each institution is divided as follows: (a) HISTORY; (b) BIBLIOGRAPHY; (c) REPORTS; (d) PAPERS ON NATURAL HISTORY. All the material of a specific institution from its foundation to 1865 (with such other bibliographical material published since, which may be of importance as covering this period), is thus to be found in one place. By consulting either the TABLE OF CONTENTS or the INDEX OF INSTITUTIONS, the location of the specific institution may be easily found.

Under the HISTORY, it is aimed to give briefly such facts as will give an idea of the organization, personnel, officers, activities, and subsequent history of an institution in its relation especially to natural history. Many of the organizations dealt with in this book were not primarily devoted to natural history, but contributed in an indirect way, either through a medium of publication, or by virtue of their make-up, to the furthering of natural history interests. Wherever and whenever possible, quotations from the publications of the organization concerned are employed in order to give an idea of the aims, spirit and atmosphere of the organization and its workers.

Under the BIBLIOGRAPHY, it is intended to include such titles as will comprehend the history and publications of the Society, which do not appear under the following heads:

The **REPORTS** are applicable mainly to the Exploring Expeditions, the State Geological Surveys, and in some cases to the Societies. It is aimed, under this section, to give the contents of the Reports of these institutions, with references to other editions, whenever possible, and with especial reference to the natural history matter contained therein.

Under **PAPERS ON NATURAL HISTORY**, will be found a chronological catalogue of the papers on natural history pertaining to that institution or to be found on its publications. Under the Scientific Societies, the papers are arranged chronologically under the date of reading, or when that is not possible, by the date of publication. The list is prefaced by an enumeration of the dates of the various parts of the organ or organs of publication of the institution in question. Where papers have been read before more than one society, cross references have been given.

In the cases of Scientific Journals, it is intended to show the natural history contents of each number, so that at a glance it is possible to determine whether any particular number contains any articles on natural history.

In the case of State Surveys and Exploring Expeditions, the Papers on Natural History include those titles which describe either the collections or the examinations made, but which have been published in places other than their own Reports. In the case of several important exploring expeditions, this list contains the only accessible scientific records, as Reports of an official character were never published. Notable instances of this are the Rodgers & Ringgold North Pacific Exploring Expedition (1853), and the Northwest Boundary Survey (1857). Reviews of important Papers, Reports, etc., are noted.

The method of cross-referencing between institutions is illustrated in the following examples. After a given entry, a reference such as this appears: "See also **LONG EXPEDITION TO THE ROCKIES** (1819);" or, "Rd (read) before Bost. Soc. Nat. Hist. (1830), Dec. 12, 1856. In its Proc. v. 6, p. 84-9." The date in parentheses indicates the date of foundation of the institution referred to, as, 1819, in which year the Long Expedition to the Rockies was sent out by the government; or, 1830, the year of the foundation of the Boston Society of Natural History. By consulting the Table of Contents under the respective dates, the location of more information concerning these institutions is to be found quite readily.

The outstanding institutions during the Pioneer Century, those which played the most prominent and successful parts in advancing and promoting the cause of natural history, were, with their corresponding dates of formation, the **AMERICAN PHILOSOPHICAL SOCIETY**, at Philadelphia (1769); the **ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA** (1812); the **AMERICAN**

JOURNAL OF SCIENCE (1818); the LYCEUM OF NATURAL HISTORY OF NEW YORK (1817); the BOSTON SOCIETY OF NATURAL HISTORY (1830); MASSACHUSETTS GEOLOGICAL SURVEY (1830); NATURAL HISTORY SURVEY OF NEW YORK (1836); PENNSYLVANIA GEOLOGICAL SURVEY (1836); SMITHSONIAN INSTITUTION (1846); AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (1848); WILKES'S U. S. EXPLORING EXPEDITION (1838); PACIFIC RAILROAD SURVEYS (1853); RODGERS & RINGGOLD NORTH PACIFIC EXPLORING EXPEDITION (1853); AMERICAN ACADEMY OF ARTS & SCIENCES, BOSTON (1780); ESSEX INSTITUTE (1848).

The titles of several thousand papers on American natural history, contained in the publications of these and the other institutions, are to be found in this volume, in their proper places.

(2) A BIBLIOGRAPHY OF BOOKS, ARTICLES AND MISCELLANEOUS PUBLICATIONS RELATING TO AMERICAN NATURAL HISTORY. This section contains titles not published in the Proceedings and Transactions of the scientific societies, the Reports of Exploring expeditions and geologic surveys, or in the scientific journals, enumerated under (1). It consists mainly of a catalogue of isolated books published by the authors themselves, without any institutional supervision or connection, and such articles or papers as appeared in obscure or not easily accessible medical, agricultural and in some instances foreign journals and newspapers.

It is divided into two parts, the first containing a list of books and papers published prior to 1769, and regarded as the publications of Colonial Times; the second, containing titles between 1769 and 1865, and representing the literature of the Pioneer Century.

In the first part have been recorded especially the papers published in the Philosophical Transactions of the Royal Society of London, one of the very few agencies for scientific publication available to the colonists in America.

Important reviews of books and pamphlets appearing in both lists have been noted, chiefly those appearing in the North American Review and the American Journal of Science.

The part dealing with colonial times contains about one hundred titles; while the part comprehending the Pioneer Century contains over one thousand titles.

(3) CHRONOLOGICAL TABLES OF PUBLICATIONS, which exhibit the contemporaneity of the publications of the various institutions considered in the book, arranged by decades. A special table of abbreviations employed in these tables is given on the page preceding TABLE 1—1769-1779.

(4) AN INDEX OF AUTHORS AND NATURALISTS, arranged alphabetically, aims to show with what institutions an individual was connected. Consid-

erably over 2,500 names are contained in this list, a large number of whom were, strictly speaking, not active naturalists.

(5) AN INDEX OF INSTITUTIONS, arranged alphabetically, to facilitate determination of the date of formation of a specific institution.

All material supplied by the author has been bracketed. The bibliographical data contained in this book have been given with few exceptions from the original sources, after personal examinations. All volumes are octavo in size unless otherwise indicated. A set of Tables of the principal abbreviations used in this work may be found on the pages succeeding the Table of Contents.

An asterisk before the name of an author in the body of the work (*i.e.*, Part B), denotes that he was not, strictly speaking, an American. In some cases where men have spent many years in scientific work in the United States, they have been regarded as Americans, but the line of demarcation is difficult to draw.

Many of the articles printed in American publications were often reprinted in foreign scientific journals. No attempt to check them has been made, as they are easily available through the use of the Royal Society Catalogue of Scientific Literature for 1800-1874 (see under ANNOTATED BIBLIOGRAPHY: ROYAL SOCIETY OF LONDON. Catalogue of Scientific Papers).

For facility in reference to those who have the serial set of U. S. Documents at hand, the serial numbers accompanying the various volumes of Documents have been cited, applicable especially to the Reports of Federal Exploring Expeditions and Surveys.

Constant reference has been made throughout this work to that great repository of scientific knowledge, especially valuable in connection with the early part of the nineteenth century, the AMERICAN JOURNAL OF SCIENCE (1818), *q.v.*, which recently celebrated its centennial with the issue of a splendid volume reviewing in detail the achievements of American science in its various aspects, as comprehended within the pages of that Journal (see ANNOTATED BIBLIOGRAPHY: CENTURY OF SCIENCE IN AMERICA). I have examined the Journal page by page (on two different occasions) from its inception in 1818 to 1867, and in this way have gathered the information relating to the history, bibliography, etc., of the less well-known institutions met with in this work. By referring to this Journal (*q.v.*, under 1818), there will be found the natural history contents of the first ninety volumes, showing what may be found in each number of the Journal issued, with the necessary bibliographical data.

Frequent reference has also been made to Dr. George P. Merrill's very admirable, and now classic "Contributions to a History of American Geology" (see ANNOTATED BIBLIOGRAPHY: MERRILL, G. P. (1)), for criticisms

of geological surveys, the work of geologists, expeditions, etc.; in short, anything connected with the work of geologists, palaeontologists, and mineralogists in the United States.

My indebtedness is also very great to the extensive and invaluable researches of the late Dr. George Brown Goode, Assistant Secretary of the Smithsonian Institution, into the early history of American natural history, and American science and its institutions generally (see ANNOTATED BIBLIOGRAPHY: GOODE (1) to (7)).

Special mention should also be made of Darton's very useful "Bibliography of American Geology: 1732-1891 (see ANNOTATED BIBLIOGRAPHY: DARTON).

For brief accounts of the routes followed by the various exploring expeditions, reference has been made to Lt. G. K. Warren's excellent "Memoir . . .," which constitutes v. 11 of the well-known Pacific Railroad Surveys (see WARREN, G. K., under the ANNOTATED BIBLIOGRAPHY). Miss A. R. Hasse's great series of "Indexes to the economic material of state documents" has been especially useful for its lists of state documents relating to the geological surveys of thirteen states (see ANNOTATED BIBLIOGRAPHY: HASSE (2)).

Particular attention should also be called to Dr. G. P. Merrill's "Contributions to a history of the state geological and natural history surveys," published in 1920. References have been made in the appropriate places to the comprehensive individual state histories contained therein (see ANNOTATED BIBLIOGRAPHY: MERRILL, G. P. (2)).

In fact, all the works constituting the ANNOTATED BIBLIOGRAPHY have been of use in the course of this work. In a certain sense, therefore, the purpose of this book has been to both complement and supplement such researches as those of Messrs. Goode, Merrill, Warren, Darton, etc.

This Bibliography had its origin in December, 1914, in suggestions made by my friend and former teacher, Prof. A. C. Goldfarb of the Biology Department of the College of the City of New York, and to those made by Dr. L. Hussakof, formerly curator of Ichthyology, the American Museum of Natural History. I take this opportunity of expressing my appreciation of their interest and assistance at various stages of the work.

In a partially completed form, it was submitted as a graduation requirement in June, 1916, to the New York State Library School, Albany, N. Y. To Mr. Walter Stanley Biscoe, senior librarian and bibliographer of the New York State Library, my debt is very great, for his generous assistance in outlining the work in its early days, and for the privilege of calling freely on his unrivalled store of bibliographical knowledge, and bibliographical methods.

Work on the Bibliography was continued while serving as a member of the Science Division of the New York Public Library, during 1916 and 1917. Owing to service with the U. S. Army and the American Library Association, further activity was suspended during 1918 and 1919.

Since February, 1920, the entire MSS. has been revised, all the titles verified, and numerous and extensive additions made. This re-examination, it is hoped, has reduced the errors to a minimum.

Research has been carried on mainly in the following libraries: the New York State Library, Albany, N. Y.; the New York Public Library; the Library of Congress (including the Smithsonian Deposit); the New York Botanical Garden Library; the American Museum of Natural History Library; the New York Academy of Medicine Library; the Library of the Museum of the Brooklyn Institute of Arts & Sciences; the Brooklyn Botanic Garden Library; the Boston Society of Natural History Library; the Yale and Harvard University Libraries; the Albany Art and Historical Society Library; and the Library of the Academy of Natural Sciences of Philadelphia. I take this occasion of thanking the directors and their associates of the institutions enumerated for the many courtesies extended.

To Dr. John Hendley Barnhart, the bibliographer, and former librarian of the New York Botanical Garden, I am profoundly grateful for the many kindnesses he has shown, for the very helpful advice in the preparation of parts of the MSS., and for placing at my beck and call his extraordinary bibliographical knowledge of botany and natural history generally. If botany is unusually well represented in this work, it is due to Dr. Barnhart's efforts to remind me of everything coming within the scope of the work.

During the course of nine years many have rendered assistance of one sort or another, and I wish to place on record my appreciation of these efforts. I have been favored with courtesies and information by the following: the Misses Dorothy and Frances Kellert; Miss Anne Axelroad; Mr. James I. Wyer, Jr., and Mr. Frank K. Walter, respectively, director and vice-director of the New York State Library School at Albany; Mr. Sidney and Miss Sadye C. Meisel (for the drudgery of proof-reading); Miss Mary Ellis; Mr. F. L. D. Goodrich; Miss Susan Hutchinson and Miss Ladd of the Brooklyn Museum; Miss Sarah H. Harlow, the librarian of the N. Y. Botanical Garden; Mrs. C. F. Norton of the Transylvania University Library, Lexington, Ky.; Mr. R. S. Fletcher, librarian at Amherst College; Mr. H. H. Ballard of the Pittsfield Athaenaeum; Mr. Andrew Keogh, librarian of Yale University; Dr. Paul M. Rea, lately director of the Charleston (S. C.) Museum; Mr. Bates, of the Connecticut Historical Society Library at Hartford; Miss Minnie Singer; Mr. William Beer; Mr. J. P.

Fowler; and the librarians of the following institutions: the Library of the Surgeon-General's Office; American Philosophical Society; the Worcester Lyceum of Natural History; Rhode Island Historical Society; Brown University; Utica Public Library; Hudson (N. Y.) and Newburgh (N. Y.) Public Libraries; Williams College Library; United Engineering Societies Library; Library of Columbia University; the Smithsonian Institution; the Wilmington Institute, Wilmington, Delaware; Little Rock Public Library; Arkansas State History Commission (Mr. Dallas Herndon); Pennsylvania College, Gettysburg, Pa. (Mr. Karl J. Grimm); Long Island Historical Society, Brooklyn, N. Y.; Kings County Medical Society, Brooklyn, N. Y.; Dr. Ralph W. Tower, librarian of the American Museum of Natural History; Dr. John M. Clarke, director of the N. Y. State Museum.

I am very grateful to the following for criticisms of various parts of the manuscript: Mr. H. M. Lydenberg, reference librarian, N. Y. Public Library; Mr. Charles Wenhold, of Brooklyn, N. Y.; Dr. Paul M. Rea, lately director of the Charleston Museum, now of the Cleveland Museum of Natural History; Miss Ray Simpson, librarian of the Brooklyn Botanic Garden.

This work of reference has been planned and produced with the varied and distinctive needs of the scientist, the librarian, the bibliographer, and the student, in mind. The work has been subjected to several revisions and the most painstaking care taken to reduce the errors and the omissions to a minimum.

In conclusion, if this bibliographical portrait or picture of the achievements of the pioneer institutions and the pioneer workers aids in disseminating a further knowledge of what has been accomplished during, and of what has been written about the Pioneer Century of Natural History in the United States, the object of the work will have been attained.

1593 PRESIDENT STREET,
BROOKLYN, NEW YORK

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PART A

(In Volume I)

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PART B

(In Volumes II and III)

THE INSTITUTIONS WHICH HAVE CONTRIBUTED TO THE RISE AND PROGRESS OF AMERICAN NATURAL HISTORY WHICH WERE FOUNDED OR ORGANIZED BETWEEN 1769 AND 1865, ARRANGED CHRONOLOGICALLY BY THEIR RESPECTIVE DATES OF FOUNDATION (as follows):

- 1769 American Philosophical Society, Philadelphia.
- 1773 Charleston (S. C.) Museum.
- 1780 American Academy of Arts & Sciences, Boston.
- 1784 Peale's Philadelphia Museum.
- 1787 University of the State of New York, Annual Reports of the Board of Regents.
- 1791 Society for the Promotion of Agriculture, Arts & Manufactures, New York City.
- 1793 Harvard College Mineralogical Cabinet, Cambridge.
- 1797 Medical Repository.
- 1798 American Mineralogical Society, New York City.
- 1799 Connecticut Academy of Arts & Sciences, New Haven.
East India Marine Society, Salem, Mass.
- 1801 Elgin Botanic Garden, New York City.
- 1802 Yale College Mineralogical Cabinet, New Haven.
- 1803 Sibley's Exploration of the Red River.
- 1804 Dunbar's Expedition to Louisiana.
Lewis and Clark Expedition.
New York Historical Society.
Philadelphia Medical & Physical Journal.
Society for the Promotion of Useful Arts, Albany.
- 1805 Cambridge (Mass.) Botanic Garden.
Charleston (S. C.) Botanic Garden & Society.
College of New Jersey (Princeton) Cabinet of Natural History.
Pike's Expeditions.

- 1806 Linnaean Society of Philadelphia.
- 1810 American Mineralogical Journal.
American Medical & Philosophical Register.
- 1812 Academy of Natural Sciences of Philadelphia.
- 1813 Literary & Philosophical Society of South Carolina, Charleston.
Pittsburg Chemical & Physiological Society.
- 1814 Linnaean Society of New England, Boston.
Literary & Philosophical Society of New York.
- 1816 Columbian Institute for the Promotion of Arts & Sciences, Wash-
ington, D. C.
- 1817 American Monthly Magazine & Critical Review.
Lyceum of Natural History of New York.
Washington Botanical Society.
- 1818 American Journal of Science.
Troy Lyceum of Natural History.
Western Museum Society, Cincinnati.
- 1819 American Geological Society, New Haven.
Hudson Association for Improvement in Science.
Long Expedition to the Rockies.
- 1820 Cass Expedition to the Great Lakes.
Catskill (N. Y.) Lyceum of Natural History.
- 1821 Delaware County Chemical & Geological Society, Delhi, N. Y.
Franklin Society of Providence.
- 1822 Amherst College Natural History Society and Cabinets, Amherst, Mass.
Maryland Academy of Science & Literature, Baltimore.
New York Medical & Physical Journal.
Western Quarterly Reporter of the Medical, Surgical & Natural Sciences.
- 1823 Albany Lyceum of Natural History.
Boston Journal of Philosophy & the Arts.
Long Expedition to the Sources of the St. Peter's.
Lyceum of Natural History, Berkshire Medical Institution, Pittsfield,
Mass.
North Carolina Geological Surveys.
Newburgh Lyceum of Natural Sciences.
Utica Lyceum of Natural History.

- 1824 Albany Institute.
South Carolina Geological Surveys.
Transylvania University Botanical Garden, Lexington, Ky.
- 1825 Botanic Club of Washington, D. C.
Worcester Lyceum of Natural History.
- 1826 Chester County Cabinet of Natural Science, West Chester, Pa.
Maclurian Lyceum of Philadelphia.
- 1827 Delaware Academy of Natural Sciences, Wilmington, Delaware.
Western Journal of Medical & Physical Sciences.
- 1828 Transylvania Journal of Medicine & the Associate Sciences.
- 1830 Boston Society of Natural History.
Massachusetts Geological Surveys.
- 1831 American Botanical Register.
Monthly American Journal of Geology & Natural Science.
Schoolcraft's Expedition to the Indian Country.
Tennessee Geological Surveys.
Virginia Historical & Philosophical Society, Richmond.
- 1832 Antiquarian & Natural History Society of Arkansas, Little Rock.
Geological Society of Pennsylvania.
New York State Agricultural Society, Albany.
Schoolcraft & Allen's Expedition to the Source of the Mississippi.
- 1833 Delaware County Institute of Science, Media, Pa.
Essex County Natural History Society, Salem, Mass.
Maryland Geological Survey.
United States Naval Lyceum, Brooklyn, N. Y.
- 1834 Advocate of Science & Annals of Natural History.
Featherstonhaugh Survey of the Missouri & Red Rivers.
Yale Natural History Society.
- 1835 Connecticut Geological Survey.
Dodge Expedition to the Rockies.
Featherstonhaugh Survey of the Coteau de Prairie.
Magazine of Horticulture & Botany.
Natural History Society of Hartford, Conn.
New Jersey Geological Surveys.
Virginia Geological Surveys.
Western Academy of Natural Sciences, Cincinnati.
Williams College Lyceum of Natural History.

- 1836 Cuvierian or Natural History Society of Wesleyan University, Middletown, Conn.
Georgia Geological Survey.
Maine Geological Surveys.
Natural History Survey of New York.
Nicollet's Explorations of the Upper Mississippi.
Pennsylvania Geological Survey.
U. S. Commissioner of Patents. Agricultural Reports.
Western Academy of Natural Sciences, St. Louis.
- 1837 Delaware Geological Survey.
Harvard Natural History Society, Cambridge.
Indiana Geological Surveys.
Michigan Geological Surveys.
Ohio Geological Survey.
University of Michigan Natural History Museum, Ann Arbor.
Zoological & Botanical Survey of Massachusetts.
- 1838 Brooklyn, N. Y., Lyceum of Natural History.
Wilkes's U. S. Exploring Expedition.
- 1839 Agricultural, Horticultural & Botanical Society, Jefferson College, Mississippi.
New Hampshire Geological Surveys.
Owen's Survey of Iowa, Illinois & Wisconsin.
Rhode Island Geological Survey.
- 1840 Association of American Geologists & Naturalists.
National Institution for the Promotion of Science, Washington, D. C.
Natural History Society of Geneva, N. Y.
- 1841 Northern Academy of Arts & Sciences, Hanover, N. H.
- 1842 American Ethnological Society, New York City.
Botanical Society of Wilmington, Delaware.
Entomological Society of Pennsylvania, York, Pa.
Fremont's Expedition to the Missouri River & the Rocky Mountains.
Lynn Natural History Society, Lynn, Mass.
- 1843 Fremont's Expedition to Oregon & California.
Iowa Historical & Geological Institute, Burlington.
New York State Cabinet of Natural History, Albany, N. Y.
Portland (Maine) Society of Natural History.
- 1844 Allen's Expedition to the Des Moines & Blue Earth Rivers.
Linnaean Association of Pennsylvania College, Gettysburg, Pa.
Missouri Historical & Philosophical Society, Jefferson City, Mo.
Vermont Geological Surveys.

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- 1845 Abert's Explorations of the Upper Arkansas.
American Journal of Agriculture & Science.
Cleveland Academy of Natural Sciences.
Fremont's Explorations in Upper California.
- 1846 Abert's Examinations of New Mexico.
Charleston Medical Journal and Review.
Concord (N. H.) Natural History Society.
Emory's Reconnaissance from Fort Leavenworth to San Diego.
Ohio Agricultural Reports.
Smithsonian Institution.
Wislizenus's Tour to Northern Mexico.
- 1847 Lynch's Dead Sea Expedition.
Owen's Chippewa Land District Survey of Wisconsin.
U. S. Survey of the Mineral Lands of Michigan, by Jackson.
- 1848 Alabama Geological Survey.
American Association for the Advancement of Science.
Essex Institute, Salem, Mass.
Owen's Survey of Wisconsin, Iowa & Minnesota.
United States & Mexican Boundary Survey.
- 1849 Foster & Whitney's Survey of the Lake Superior Land District.
Gilliss's U. S. Naval Astronomical Expedition to the Southern Hemisphere.
Marcy's Expedition from Fort Smith to Santa Fe.
Pope's Exploration of Minnesota.
Reconnaissances of Routes from San Antonio to El Paso.
Simpson's Survey of a Route between Fort Smith & Santa Fe & An Expedition to the Navajo Country.
Stansbury's Explorations of the Salt Lake Valley.
U. S. Surveys of California and Oregon.
U. S. Survey of the Creek Indian Boundary Line by Sitgreaves & Woodruff.
- 1850 Annual of Scientific Discovery.
Derby's Reconnaissances in California.
Mississippi State Geological Society.
Mississippi Geological Surveys.
- 1851 Herndon & Gibbon's Explorations of the Valley of the Amazon.
Illinois Geological Survey.
Lee's Dolphin Expedition.
Sitgreaves's Expedition down the Zuni & Colorado Rivers.
Society for the Advancement of Natural Sciences, Louisville, Ky.
Wisconsin State Agricultural Society.

- 1852 *Annals of Science.*
Kane's Expedition to the Arctic Regions.
Marey's Exploration of the Red River.
National Botanic Garden, Washington, D. C.
Perry's U. S. Japan Expedition.
- 1853 *California Academy of Natural Sciences, San Francisco.*
California Geological Survey.
Elliott Society of Natural History, Charleston, S. C.
Florida Geological Survey.
Mining Magazine.
Missouri Geological Survey.
New Orleans Academy of Sciences.
Pacific Railroad Surveys.
Abbot's Explorations v. 6.
Beckwith's Explorations v. 2.
Gunnison's Explorations v. 2.
Parke's Explorations v. 7.
Pope's Explorations v. 2.
Stevens's Explorations v. 1 & 12.
Whipple's Explorations v. 3 & 4.
Williamson's Explorations v. 5 & 6.
Page's Exploration of the La Plata.
Rodgers & Ringgold U. S. North Pacific Exploring Expedition.
Wisconsin Geological Survey.
- 1854 *Kentucky Geological Survey.*
Marey's Exploration of the Big Wichita.
Pottsville (Pa.) Scientific Association.
- 1855 *Iowa Geological Survey.*
Pope's Expedition along the 32d Parallel.
Warren's Sioux Expedition.
Wisconsin Natural History Association, Milwaukee.
- 1856 *Academy of Science of St. Louis.*
Bryan's Expedition from Fort Riley to Bridger's Pass.
Chicago Academy of Sciences.
Cincinnatus, (The).
Warren's Explorations in Nebraska & Dakota.
- 1857 *Arkansas Geological Survey.*
Ives Expedition up the Colorado.
Michler's Expedition to the Isthmus of Darien.
Northwest Boundary Survey.
- 1858 *Illinois Natural History Society, Bloomington.*
Mullan's Expedition from Fort Walla-Walla to Fort Benton on the Missouri River.

Potomac—Side Naturalists' Club, Washington, D. C.
 Simpson's Utah Expedition.
 Texas Geological Surveys.
 Wyoming Historical & Geological Society, Wilkes-Barre, Pa.

1859 Entomological Society of Philadelphia.
 Macomb Expedition to New Mexico, Utah & Colorado.
 Minnesota Geological Surveys.
 Museum of Comparative Zoology, Cambridge, Mass.
 Reynolds's Exploration of the Yellowstone.
 Springfield (Mass.) Museum of Natural History.
 Wilmington Institute, Wilmington, Delaware.
 Zoological Society of Philadelphia.

1860 Hall's Arctic Expeditions.
 Hayes's Arctic Expeditions.
 Isthmus of Chiriqui Expedition.

1861 Buffalo Society of Natural Sciences.

1862 Linnaean Society of Lancaster, Pa.
 Ward Museum of Natural History, Rochester, N. Y.

1863 National Academy of Sciences.

1864 Harvard University Herbarium (Gray Herbarium).
 Kansas Geological Survey.
 Louisiana Geological Survey.

1865 American Journal of Conchology.
 Nevada Geological Survey.

A BIBLIOGRAPHY OF THE BOOKS, ARTICLES AND MISCELLANEOUS PUBLICATIONS, RELATING TO AMERICAN NATURAL HISTORY, NOT PUBLISHED IN THE PROCEEDINGS AND TRANSACTIONS OF THE SCIENTIFIC SOCIETIES, REPORTS OF U. S. EXPLORING EXPEDITIONS AND THE STATE GEOLOGICAL SURVEYS, AND THE SCIENTIFIC JOURNALS CONTAINED IN THE BODY OF THIS WORK: IN TWO PARTS:

Pt. I. 1590-1768.

Colonial Period (From the earliest days to the formation of an active American Philosophical Society at Philadelphia, in 1769).

Pt. II. 1769-1865.

Pioneer Century of American natural history.

CHRONOLOGICAL TABLES OF THE PUBLICATIONS OF THE DIFFERENT INSTITUTIONS CONTAINED IN THIS WORK.

Tables by Decades.

I-X.

INDEX OF AUTHORS AND NATURALISTS.

INDEX OF INSTITUTIONS.

LISTS OF ABBREVIATIONS

1. GENERAL

A.	Annals	Linn.	Linnaean
abstr.	abstract (s)	Lit.	Literary,
Acad.	Academy		Literature
acc.	accepted	Lond.	London
Adv.	Advancement	Lyc.	Lyceum
Agric.	Agriculture	M.	Memoirs
Amer.	American	M. C.	Miscellaneous
Ann.	Annual		Collections
Annot.	Annotated	Mag.	Magazine
Anon.	Anonymous	Manuf.	Manufactures
appx.	appendix	Med.	Medicine,
art.	article (s)		Medical
Ass.	Assembly	Mem.	Memoirs
Assoc.	Association	Min.	Mineralogy,
Astron.	Astronomical		Mineralogical
Balt.	Baltimore	Misc. Coll.	Miscellaneous
Bdry.	Boundary		Collections
Bib[liog].	Bibliography	Mthly.	Monthly
Biog[r].	Biographical	Mus.	Museum
Bost.	Boston	n. s.	new series
Bot.	Botany, Botanic	Nat.	Natural,
Bull.	Bulletin		National
Bur.	Bureau	no.	number (s)
C.	Contributions	Occas.	Occasional
Cab.	Cabinet	Ornith.	Ornithology
Cal.	California	p.	page (s)
Cat.	Catalogue	P.	Proceedings
co.	company	Pal.	Palaeontology
Co.	County	Pharm.	Pharmacy
col.	colored	Phil.	Philosophical
Coll.	Collections	Phila.	Philadelphia
com.	communicated	Phys.	Physical
Com.	Communications	pl.	plate (s)
Commiss.	Commissioner	port.	portrait (s)
Comp.	Comparative	pref.	preface
Conch.	Conchology	pres.	presented
Cong.	Congress	print.	printing
cont.	continued	Proc.	Proceedings
Contr.	Contributions	Prof.	Professional
corr.	corrected	Prom.	Promotion
Crit.	Critical	pt.	part (s)
Dept.	Department	pub.	published
diagr.	diagrams	Pub.	Publication (s)
Dis.	Discourse	Quart.	Quarterly

Div.	Division	R.	Report (s)
Doc. (s)	Document (s)	rd.	read
Econ.	Economic	Reconn.	Reconnaissance (s)
ed.	edition (s), edited, editor	Reg.	Register
		Repos.	Repository
		repr.	reprinted, Reprint
Educ.	Educational	rev.	review
Eng.	Engineers	Rev.	Review
Ent.	Entomology	R.R.	Railroad
enl.	enlarged	S. C.	Smithsonian Contributions to Knowledge
Ethnol.	Ethnology	Sc.	Science
Ex.	Executive	sect.	section (s)
Exped.	Expedition	Sen.	Senate
Exper.	Experiment	ser.	series
Explor.	Exploration (s)	sess.	session
Extr.	Extract (s)	Soc.	Society
fig.	figure (s)	St.	State
fold.	folded	Stud.	Studies
Gard.	Garden	supp.	supplement
Gaz.	Gazette	Surg.	Surgery, Surgical
Geol.	Geology, Geological	Surv.	Survey (s)
Govt.	Government	T.	Transactions
H.	House	tab.	table (s)
Hist.	History, Historical	Tech.	Technical
Hort.	Horticulture, Horticultural	Topogr.	Topographical
illus.	illustration (s)	Trans.	Transactions
Inst.	Institute, Institution	Univ.	University
J.	Journal	v.	volume (s)
Jour.	Journal	Wash.	Washington
K.	Knowledge	Zool.	Zoology, Zoological

2. OF INSTITUTIONS, SERIALS, ETC.

Acad. Nat. Sc. Phila.	Academy of Natural Sciences of Philadelphia
Acad. Sc. St. Louis	Academy of Science of St. Louis
Advocate Sc. & Annals Nat. Hist.	Advocate of Science & Annals of Natural History
Albany Inst.	Albany Institute
Albany Lyc. Nat. Hist.	Albany Lyceum of Natural History
Amer. Acad. A. & Sc.	American Academy of Arts & Sciences
Amer. Antiq. Soc.	American Antiquarian Society
Amer. Assoc. Adv. Sc.	American Association for the Advancement of Science
Amer. Assoc. Geol. & Nat.	American Association of Geologists & Naturalists

Amer. Assoc. Mus.	American Association of Museums
Amer. Bot. Reg.	American Botanical Register
Amer. Ethnol. Soc.	American Ethnological Society
Amer. Geol.	American Geologist
Amer. Geol. Soc.	American Geological Society
Amer. Inst. Mining Eng.	American Institute of Mining Engineers
Amer. J. Conch.	American Journal of Conchology
Amer. J. Sc.	American Journal of Science
Amer. Med. & Phil. Reg.	American Medical & Philosophical Register
Amer. Miner. J.	American Mineralogical Journal
Amer. Mthly. Mag. & Crit. Rev.	American Monthly Magazine & Critical Review
Amer. Phil. Soc.	American Philosophical Society
Amer. Quart. J. Agric. & Sc.	American Quarterly Journal of Agriculture & Science
Annals Sc.	Annals of Science
Assoc. Amer. Geol. & Nat.	Association of American Geologists & Natural- ists
Biol. Soc. Wash.	Biological Society of Washington
Bost. J. Phil. & Arts.	Boston Journal of Philosophy & the Arts
Bost. Soc. Nat. Hist.	Boston Society of Natural History
Bot. Gaz.	Botanical Gazette
Buffalo Soc. Nat. Sc.	Buffalo Society of Natural Sciences
Cal. Acad. Nat. Sc.	California Academy of Natural Sciences
Cal. Geol. Surv.	California Geological Survey
Charleston Med. J.	Charleston (S. C.) Medical Journal
Chester Co. Cab. Nat. Sc.	Chester County Cabinet of Natural Sciences
Chicago Acad. Sc.	Chicago Academy of Sciences
Cleve. Acad. Nat. Sc.	Cleveland Academy of Natural Science
Columbian Inst. Prom. A. & Sc.	Columbian Institute for the Promotion of Arts & Sciences
Conn. Acad. A. & Sc.	Connecticut Academy of Arts & Sciences
Delaware Co. Inst. Sc.	Delaware Institute of Science
Elgin Bot. Gard.	Elgin Botanical Garden
Elliott Soc. Nat. Hist.	Elliott Society of Natural History
Ent. Soc. Phila.	Entomological Society of Philadelphia
Essex Co. Nat. Hist. Soc.	Essex County Natural History Society
Essex Inst.	Essex Institute
Geol. Soc. Amer.	Geological Society of America
Geol. Soc. Pa.	Geological Society of Pennsylvania
Harvard Nat. Hist. Soc.	Harvard Natural History Society
Illinois Nat. Hist. Soc.	Illinois Natural History Society
Jour. Geol.	Journal of Geology
Linn. Assoc. Pa. Coll.	Linnaean Association of Pennsylvania College
Linn. Soc. New England	Linnaean Society of New England
Linn. Soc. Phila.	Linnaean Society of Philadelphia
Lit. & Phil. Soc. N. Y.	Literary & Philosophical Society of New York
Lit. & Phil. Soc. S. C.	Literary & Philosophical Society of South Carolina
Maclurian Lye. Phila.	Maclurian Lyceum of Philadelphia

Mag. Hort. & Bot.	Magazine of Horticulture & Botany
Maryland Acad. Sc. & Lit.	Maryland Academy of Science & Literature
Mass. Geol. Surv.	Massachusetts Geological Survey
Mass. Hort. Soc.	Massachusetts Horticultural Society
Med. Repos.	Medical Repository
Mining Mag.	Mining Magazine
Minn. Acad. Nat. Sc.	Minnesota Academy of Natural Sciences
Minn. Geol. & Nat. Hist. Surv.	Minnesota Geological & Natural History Survey
Mus. Comp. Zool.	Museum of Comparative Zoology
N. Y. Acad. Sc.	New York Academy of Sciences
N. Y. Bot. Gard.	New York Botanical Garden
N. Y. Hist. Soc.	New York Historical Society
N. Y. Lyc. Nat. Hist.	New York Lyceum of Natural History
N. Y. Med. & Phys. J.	New York Medical & Physical Journal
N. Y. St. Agric. Soc.	New York State Agricultural Society
N. Y. St. Cab. Nat. Hist.	New York State Cabinet of Natural History
Nat. Acad. Sc.	National Academy of Sciences
Nat. Cycl. Amer. Biog.	National Cyclopaedia of American Biography
Nat. Hist. Soc. Hartford	Natural History Society of Hartford
Nat. Hist. Surv. N. Y.	Natural History Survey of New York
Nat. Inst. Prom. Sc.	National Institution for the Promotion of Science
Pacific RR. Surv.	Pacific Railroad Surveys
Phil. Soc. Wash.	Philosophical Society of Washington
Phila. Acad. Nat. Sc.	Philadelphia Academy of Natural Sciences
Phila. Med. & Phys. J.	Philadelphia Medical & Physical Journal
Pittsfield Lyc. Nat. Hist.	Pittsfield Lyceum of Natural History (Berk- shire Medical Institution)
Pop. Sc. Mthly.	Popular Science Monthly
Portland Soc. Nat. Hist.	Portland (Me.) Society of Natural History
Smith. Inst.	Smithsonian Institution
Soc. Prom. Agric. Arts & Manuf.	Society for the Promotion of Agriculture, Arts & Manufactures
Soc. Prom. Useful Arts	Society for the Promotion of Useful Arts
Transylvania J. Med. & Assoc. Sc.	Transylvania Journal of Medicine and the Associated Sciences ,
Troy Lyc. Nat. Hist.	Troy Lyceum of Natural History
U. S. & Mexican Bdry. Surv.	United States & Mexican Boundary Survey
U. S. Geol. Surv.	United States Geological Survey
Univ. Colo.	University of Colorado
Univ. St. N. Y.	University of the State of New York
Western J. Med. & Phys. Sc.	Western Journal of the Medical & Physical Sciences
Western Mus. Soc.	Western Museum Society
Yale Nat. Hist. Soc.	Yale Natural History Society
Zool. & Bot. Surv. Mass.	Zoological & Botanical Survey of Massachusetts
Zool. Soc. Phila.	Zoological Society of Philadelphia

AN ANNOTATED BIBLIOGRAPHY OF THE PUBLICATIONS
RELATING TO THE HISTORY, BIOGRAPHY, AND BIBLIOGRAPHY OF AMERICAN NATURAL HISTORY AND ITS INSTITUTIONS, DURING COLONIAL TIMES AND THE PIONEER CENTURY, WHICH HAVE BEEN PUBLISHED UP TO 1924; WITH A CLASSIFIED SUBJECT AND GEOGRAPHIC INDEX

PART A

ADAMS, George I[rrving]. The Upper Cretaceous of Kansas: a historical review. Topeka, 1898. (In Univ. Geol. Surv. Kansas. v. 4. Palaeontology. p. 13-27)

Addenda by S. W. WILLISTON, p. 28-32.

AGASSIZ, Alexander. Harvard University Museum: its origin and history; An address at the opening of the Geological Section of the Harvard University Museum. Cambridge, 1902. 18 p. 1 plan.

See also MUSEUM OF COMPARATIVE ZOOLOGY (1859)

- (1) AGASSIZ, L[ouis]. Nomenclator zoologicus: continens nomina systemica generum animalium tam viventium quam fossilium, secundum ordinem alphabeticum disposita, adjectis auctoribus, libris, in quibus, reperiunter, anno editionis, etymologia et familiis, ad quas pertinent, in singulis classibus. . . . Soloduri, Sumptibus et typis Jent et Gassmann, 1842-46. 4°.

26 fascicules in 1 v. Each pt. contains special title-page, pagination & bibliography.

There is also his "Nomenclatoris zoologici index universalis." Soloduri, 1846. 8 + 393 p.

Rev. by Asa GRAY in Amer. J. Sc. ser. 2, v. 3, (v. 53), p. 302-9. Mar. 1847.

- (2) AGASSIZ, Louis, and STRICKLAND, Hugh Edwin. Bibliographia zoologiae et geologiae: a general catalogue of all books, tracts, and memoirs on zoology and geology, by Louis Agassiz; corrected and enlarged, and edited by H. E. Strickland. London, the Ray Society, 1848-54. 4v.

v. 4 ed. by H. E. Strickland & Sir W. Jardine.

Contents:

v. 1 List of periodicals & serials indexed.

A-B; 23 + 506 p. 3 G-M 657 p.

2 C-F 492 p. 4 N-Z 604 p.

Strictly an author catalogue. American publications indexed, v. 1, p. 82-5.

Agassiz's work has been superseded by the ROYAL SOCIETY OF LONDON. Catalogue of Scientific Papers (q.v. under ROYAL)

ALBANY INSTITUTE, Albany, N. Y. History of the Institute, with an abstract of its Proceedings. Albany, 1830. (In Albany Inst. Trans. v. 1, appx. p. 1-74)

See also ALBANY INST. (1824); & the ALBANY LYC. NAT. HIST. (1823).

- ALDEN, William C[inton]. The Quaternary geology of southeastern Wisconsin with a chapter on the older rock formations. Wash. Gov't print. office, 1918. 356 p. (In U. S. Geol. Surv. Prof. Paper. 106)
Chronologically arranged bibliography, p. 19-28.
- ALDRICH, J[ohn] M[erton]. A catalogue of North American Diptera (or two-winged flies). Wash. Gov't print. office, 1905. 680 p. (In Smith. Inst. Misc. Coll. v. 46) Pub. no. 1444.
Bibliography, alphabetically by authors, p. 7-75. Catalogue, p. 77-665.
- ALLEN, J[oel] A[saph]. Recent work in North American Mammalogy. N. Y. Feb. 23, 1891. (In N. Y. Acad. Sc. Trans. v. 10, p. 71-85)
Continued in Linnaean Soc. N. Y. Proc. (Abstr.) 1894. no. 6, p. 17-45.
Historical review covering the period 1853-1890.
- ALLISON, Edith M. Bibliography and history of Colorado botany. Boulder, Colo., Dec. 1908. (In Univ. Colo. Studies. v. 6, no. 1, p. 51-76)
- AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK CITY. Pioneers of American science: An account of the exercises held and the addresses delivered at the . . . December 29, 1906. N. Y. Pub. by the Museum, Apr. 1907. 26 p. 10 port. (Guide leaflet no. 25)
Repr. in Pop. Sc. Mthly. v. 70, p. 291-316, port. Apr. 1907.
At the unveiling of busts in the foyer of the entrance to the Museum, for Audubon, Agassiz, Baird, Cope, Dana, Leidy, Torrey, Henry.
- ANDERSON, Rudolph Martin. The birds of Iowa. Davenport, July 24, 1906. (In Davenport Acad. Sc. Proc. v. 11, p. 125-417, illus. map)
Historical work, p. 128-31. Bibliography, chronologically arranged, p. 393-403.
- ANON. Scientific institutions of Boston and vicinity. Salem, Mass., 1881. (In Amer. Assoc. Adv. Sc. Proc. for Aug. 1880. v. 29, p. 767-91)
Includes Salem & Cambridge.
- AREY, Melvin F[ranklin]. A review of the development of mineralogy. Des Moines, 1907. (In Iowa Acad. Sc. Proc. 1906. v. 13, p. 7-14)
The Presidential Address before the Academy, with especial stress on the early days and the salient points.
- [BABB, Cyrus Cates]. Bibliography of Maine geology. Waterville, Me., 1913. (In Maine. State water storage commission. 3d Ann. Rept. 1912. p. 185-250)
Annotated list arranged alphabetically by author. See also MAINE GEOL. SURV. (1836)
- BACHE, Alexander Dallas. [. . . On the condition and achievements of American scientific societies . . .] Washington, 1852. (In Amer. Assoc. Adv. Sc. Proc. for 1851. v. 6, pref. p. 41-60)
Presidential Address before the Association.
- BAILEY, Liberty Hyde, Jr. Horticulture; Literature of horticulture; Horticulturists. New York, 1915. (In his Standard Cyclopaedia of Horticulture. v. 3, p. 1501-1603)

A splendid and comprehensive group of articles embracing the history, bibliography and biography of horticulture and some of the associate sciences.

p. 1503-20 Early American history; Bibliography of horticultural books (arranged alphabetically by author), p. 1522-53; Subject index to the foregoing, p. 1553; Reports of horticultural societies and organizations, p. 1553-59; North American Horticultural Periodicals, p. 1559-62; Biographies of Horticulturists, p. 1563-1603.

BAIRD, Spencer Fullerton. Report on American explorations for the years 1853 and 1854 . . . Washington, 1855. (In Smith. Inst. Ann. Rept. for 1854. v. 9, p. 79-97)

The first of a series which reviewed briefly the status and work of the numerous explorations then in progress. Continued in v. 10, p. 42-7, 1856; v. 11, p. 48-52, 1857; v. 12, p. 46-8, 1858; v. 13, p. 50-2, 1859; v. 14, p. 63-8, 1860; v. 15, p. 66-72, 1861; v. 16, p. 58-61, 1862; v. 18, p. 52-6, 1864.

(1) BAKER, Frank Collins. The Lymnaeidae of North and Middle America, recent and fossil. Chicago, Feb. 15, 1911. 16 + 539 p. 58 pl. (In Chicago Acad. Sc. Special Pub. no. 3)

Bibliography, alphabetically by author, p. 468-510.

(2) ——— A catalogue of the Mollusca of Illinois. Danville, Ill., 1910. (In Illinois State Lab. Nat. Hist. Bull. v. 7, p. 53-136)

Bibliography, alphabetically by author, p. 124-33.

BAKER, Marcus. Survey of the northwestern boundary of the United States, 1857-1861. Washington, Gov't print. office, 1900. 78 p. (In U. S. Geol. Surv. Bull. no. 174)

Review of the brief official Report submitted by the Commissioner. See also NORTHWESTERN BOUNDARY SURVEY (1857)

BALDWIN, Simeon E[ben]. The first century of the Connecticut Academy of Arts and Sciences. New Haven, 1901. (In Conn. Acad. Arts & Sc. Trans. v. 11, pref. p. 13-35)

See also CONN. ACAD. A. & SC. (1799)

BALLARD, Harlan H[oge]. Amos Eaton: a pioneer of science in Berkshire County. Pittsfield, Mass., 1897. (In Berkshire Hist. & Sc. Soc. Coll. 1897. p. 183-267)

Activities of Eaton and the Besselaer School in promoting the study of natural history.

BANKS, Nathan. List of works on North American entomology. Washington, 1900. 95 p. (In U. S. Dept. Agric. Div. Entomology. Bull. n. s. v. 24)

A classified list.

BARBOUR, Erwin H[inckley], and FISHER, Cassius A[sa]. The geological bibliography of Nebraska . . . Lincoln, Nebr., 1902. (In Nebraska. State Board Agric. Ann. Rept. for 1901. p. [247]-66)

Entries arranged alphabetically by author.

BARDEEN, Charles Russell. Anatomy in America. Madison, Wis., Sept. 1905. (In Univ. Wisconsin. Bull. Sc. Ser. v. 3, no. 4, p. 85-208)

Notes, p. 120-205, contains great deal of material concerning the development of comparative anatomy, embryology, etc., in the U. S.
 Extracts also in Kelly, H. A. *Cyclopaedia of American medical biographies*. Phila. 1912. v. 1, pref. p. 11-21.

- (1) BARNHART, John Hendley. List of local floras of the Torrey Club range. (In N. Y. Bot. Gard. Memoirs. v. 5, p. 38-45. Jan. 30, 1915)
 Contains 51 floras of Conn., N. Y., N. J., & Pa.
- (2) ————— Some American botanists of former days. (In N. Y. Bot. Gard. Jour. v. 10, p. 177-90, port. facsim. Aug. 1909)
 Repr. in Torrey. v. 9, p. 241-57. Dec. 1909.
 Very good popular account and rapid survey of the leading workers.
- (3) ————— The first hundred years of the New York Academy of Sciences. (In Scientific Monthly. v. 5, p. 463-75, illus. Nov. 1917)
 Excellent account, laying especial emphasis on the early days of the Lyceum of Nat. Hist. of N. Y. (1817), q.v.
- (4) ————— The local floras of Vermont. Burlington, Vt., 1907. (In Vermont Bot. Club. Bull. no. 2, p. 11-5. Apr. 1907)
 64 entries, arranged chronologically.
- (5) ————— Brackenridge and his book on ferns. N. Y., June, 1919. (In N. Y. Bot. Gard. Jour. v. 20, p. 117-24)
 Contains a good summary of the routes traversed by the WILKES EXPLOR. EXPED. (1838), q.v.

BARRELL, Joseph. A century of geology—the growth of knowledge of earth structure. (In Amer. J. Sc. ser. 4, v. 46, p. 133-70. July, 1918)
 Repr. in CENTURY of Science in America. New Haven, 1918. ch. 4, p. 153-92. (See below CENTURY)

BARRON, Leonard. Garden writings in America. Bost. 1916. (In Mass. Hort. Soc. Trans. 1916. pt. 1, p. 71-88)
 Rd. before the Society, Feb. 26, 1916. A review of the contributions to horticulture and allied subjects.

BARTON, Benjamin Smith. A discourse on some of the principal desiderata in natural history, and on promoting the study of this science in the United States . . . Phila. Printed by Denham & Town, 1807. 90 p.
 Rd. before PHILA. LINNAEAN SOC. (1806), q.v., June 10, 1807. Rev. in Phila. Med. & Phys. Jour. v. 3, pt. 1, p. 165-75. Nov. 1807.

BASSLER, Ray S[mith]. . . . Bibliographic index of American Ordovician and Silurian fossils. Washington, Gov't print. office, Nov. 1, 1915. 2 v. (In U. S. Nat. Mus. Bull. no. 92).
 v. 1, 8 + p. 1-718. A-Levisia
 v. 2, 4 + 719-1521. Lev-Z
 1. Bibliographic list of genera and species (alphabetically arranged). v. 1, p. 1-718 & v. 2, p. 719-1342.
 2. Index of specific names. v. 2, p. 1343-1406.
 3. Biological classification of genera. v. 2, p. 1407-27.

4. Alphabetical list of genera. v. 2, p. 1429-40.
5. Fauna lists of American Ozarkian to Lowest Helderbergian. v. 2, p. 1441-1509.
6. List of Ordovician and Silurian formations. v. 2, p. 1511-21.

BAY, J[ens] Christian. Bibliographies of botany: a contribution toward a Bibliotheca bibliographica; compiled and annotated by . . . Jena, 1909. (In *Progressus rei botanicae* . . . v. 3, p. 332-456. 1909)

U. S. bibliographies, p. 395-96.

BAYLEY, William Shirley. Bibliography and abstract of literature [of the Menominee iron-bearing district of Michigan]. Wash. Gov't print. office, 1904. (In U. S. Geol. Surv. Monograph no. 46, ch. 2, p. 41-116)

BAYLEY, W[illiam] S[hirley], and King, F[rancis] P[laisted]. Catalogue of Maine geological collection, with a brief outline history of the two surveys of the state. Waterville, Me., Colby Univ., Geol. Dept. 1890. 32 p.

See also MAINE GEOL. SURV. (1836)

BECK, Lewis C[aleb]. History of the progress of mineralogy in the state of New York. Albany, 1842. (In Nat. Hist. N. Y. Div. 3: Mineralogy. pref. p. 9-12)

See also NATURAL HISTORY SURV. N. Y. (1836)

BECKWITH, Florence. Early botanists of Rochester and vicinity . . . (In Rochester Acad. Sc. Proc. v. 5, p. 39-58, 2 pl. Feb. 1912)

Sketches of Lawrence Holzer, Charles M. Booth, Samuel B. Bradley, Joseph B. Fuller, Charles W. Seelye.

- (1) BENJAMIN, Marcus. . . The early presidents of the American Association. Easton, Pa., Dec. 1899. (In Amer. Assoc. Adv. Sc. Proc. Aug. 1899. v. 48, p. 397-459, port.)

Biographical sketches of the presidents of the Association from its formation in 1848 to the close of 1876. See Amer. Assoc. Adv. Sc. (1848). Repr. in Science, n. s. v. 10, p. 625-37, 670-79, 705-13, 759-66. Nov. 1899.

- (2) ——— The development of science in New York City. N. Y., 1893. (In WILSON, J. G., ed. Memorial History of City of N. Y. v. 4, p. 413-37)

Story of the achievements of the various institutions and individuals in the different branches of science.

- (1) BENT, Allen H[erbert]. A bibliography of the White Mountains. Bost. Appalachian Mountain Club, 1911. 114 p. port.

Classified list.

- (2) ——— Early American mountaineers. Bost. 1915. (In Appalachia. v. 13, p. 45-67, 3 pl. 12 port.)

Historical review of the various explorations of the principal American mountains.

BENTHAM, George. Address . . . read at the anniversary meeting of the Linnaean Society, May 24, 1867. (In Amer. J. Sc. ser. 2, v. 44, p. 297-316. Nov. 1867)

Repr. as separate, London, Taylor & Francis, 1867. 24 p.

General account and evaluation of the publications of American scientific

societies and scientific journals with respect to their zoological and botanical contents. Contains a brief review of the then existing American museums.

- (1) BERRY, Edward W[ilber]. Historical sketch of the flora of the Raritan formation. Trenton, N. J., 1911. (In Geol. Surv. N. J. Bull. 3. ch. 2, p. 9-15)
- (2) ——— The lower Cretaceous deposits of Maryland. Baltimore, 1911. (In Maryland Geol. Surv. Lower Cretaceous. p. 34-56)
History, p. 34-47; Bibliography, chronologically arranged, p. 47-56.

BEUTENMÜLLER, William. Bibliographical catalogue of the described transformations of North American Coleoptera. N. Y. Jan. 1891. 52 p. (In N. Y. Micros. Soc. Journ. v. 7, no. 1)

- (1) BINNEY, Amos. Remarks . . . showing the origin and history of the Society, its influence on the cultivation of the natural sciences in New England, its present condition and wants, and its claims upon the liberality of the public; by the President. Boston, Freeman & Bolles, 1845. 16 p.

A brief history of the Boston Society of Natural History, (1830), q.v.

- (2) ——— The terrestrial air-breathing mollusks of the United States, and the adjacent territories of North America, described and annotated by Amos Binney, ed. by Augustus A. Gould. Bost. Little & Brown, 1851. 5 v.

v. 1 contains

- (a) Alphabetical catalogue of authors whose works are referred to; p. 9-18.
- (b) Of the rise of scientific zoology in the United States, with notices of naturalists, particularly connected with the subject of this work. p. 31-55.
- (c) Of the ignorance and neglect of American labors in zoology exhibited by European naturalists. p. 56-62.

BINNEY, William Greene. . . . Bibliography of North American conchology previous to the year 1860, prepared for the Smithsonian Institution; pt. 1, American authors. Wash. 1863. 650 p. (In Smith. Inst. Misc. Coll. v. 5)

Pt. 2, Foreign authors. Wash., June, 1864. 306 p. (In Smith. Inst. Misc. Coll. v. 9)

"Is intended to give a full account, first of the writings of American conchologists generally, and secondly of such works of foreign authors as relate to the shells and mollusks of N. A., as far south as about the Isthmus of Tehuantepec and exclusive of the West Indies" Preface.

Comprehensive, but easy use is marred by a poor and unsystematic arrangement of material. Has author indexes.

BLACK, George F[raser]. List of works relating to the geology, mineralogy, and palaeontology of New Jersey. N. Y., The New York Public Library, Sept. 1916. 36 p.

Arranged alphabetically by author with subject index. See also N. J. Geol. Surv. (1835)

BLAKE, William P[hilips]. The progress of geological surveys in the state of Wisconsin—a review and a bibliography. Madison, Wis., 1893. (In Wisconsin Acad. Sc. Arts & Letters. v. 9, pt. 1, p. 225-31)

See also Wisconsin Geol. Surv. (1853)

BLANKENSHIP, J[oseph] W[illiam]. A century of botanical exploration in Montana, 1805-1905: collectors, herbaria and bibliography. Bozeman, Montana, 1905. (In Montana Agric. Coll. Sci. Stud. Botany. v. 1, p. 1-31).

I. Botanical collections made in Montana, p. 5-16.

II. Bibliography, p. 16-25. (Alphabetically by author)

BLATCHLEY, W[illis] S[tanley]. A century of geology in Indiana. [Indianapolis], 1917. (In Indiana Acad. Sc. Proc. for 1916. p. 89-177 c)

Very thorough and intensive study and discussion of the contributions to the geological history of the state. The state surveys up to 1865, are treated on p. 89-123. See also Indiana Geol. Surv. (1837)

- (1) BOLTON, Henry Carrington. . . . A catalogue of scientific and technical periodicals 1665-1895, together with chronological tables and a library check-list; 2d ed. Washington, 1897. 1247 p. (In Smith. Inst. Misc. Coll. v. 40)
1st ed. 1665-1882. Wash. 1885. 773 p. (In Smith. Inst. Misc. Coll. v. 29)

"It is intended to contain the principal independent periodicals of every branch of pure and applied science, published in all countries from the rise of this literature to the present time." Preface.

Pt. 1 Contains 5000 titles alphabetically arranged.

2 Additional 3600 titles.

An invaluable list.

- (2) ——— The Smithsonian Institution: its origin, growth and activities. (In Popular Sc. Monthly. v. 48, p. 289-303, 449-64. Jan.-Feb. 1896).

See also SMITH. INST. (1846)

BOSGOED, Dirk Mulder, see MULDER BOSGOED, Dirk.

BOUVÉ, Thomas Tracy. . . . Historical sketch of the Boston Society of Natural History; with a notice of the Linnaean Society which preceded it. (In Bost. Soc. Nat. Hist. Anniversary Memoirs: 1830-80. 1880. p. 3-250)

The Account of the Linnaean Society of New England (1814), q.v., is on p. 3-14.

For the contents of the rest of the volume see BOSTON SOCIETY OF NATURAL HISTORY (1830): Bibliography: 1880: Bouvé.

See also "Some reminiscences of earlier days in the history of the Society." (In Bost. Soc. Nat. Hist. Proc. v. 18, p. 242-50. Mar. 1876).

BOVEE, Gladys G. Bibliography and index of Wyoming geology, 1823-1916. Cheyenne, Wyo., 1918. (In Wyoming. Geologist's Office. Bull. no. 17, p. 317-446)

Arranged chronologically. Annotated, with author and subject indexes.

BOWKER, R[ichard] R[ogers], ed. Publications of societies: a provisional list of American scientific, literary and other societies; compiled under the editorial direction of R. R. Bowker. N. Y. Office of the Publishers' Weekly, 1899. 181 p.

Societies arranged alphabetically by their corporate names.

BOYLE, Cornelius Breckenridge. . . . A catalogue and bibliography of North American Mesozoic Invertebrata. Wash. Gov't print. office, 1893. 315 p. (In U. S. Geol. Surv. Bull. no. 102)

Pt. 1 List of authors, p. 9-21.

2 List of fossils, alphabetically by genera and species, p. 23-315.

BRADISH, Alvah. Memoir of Douglass Houghton, first state geologist of Michigan; with an appendix containing reports and abstracts of the first geological survey, and a chronological statement of the progress of geological exploration in Michigan. Detroit, Raynor & Taylor, 1889. 302 p.

See also Michigan Geol. Surv. (1837)

BRADLEY BIBLIOGRAPHY, see **REHDER, Alfred.**

- (1) **BRAGG, Laura M[ary].** Bibliography of the sylvia of South Carolina. (In Charleston Mus. Bull. v. 6, no. 8, p. 61-8. Dec. 1910; & v. 7, no. 2, p. 9-15. Feb. 1911)

Historical review of the publications relating to the botany of the state.

- (2) ——— Contributions toward a history of science in South Carolina: I— Henry W. Ravenel, LL.D. (In Charleston Mus. Bull. v. 16, no. 2, p. 17-23. Feb. 1920)

- (3) ——— The birth of the museum idea in America. (In Charleston Mus. Quart. v. 1, no. 1, p. 3-13, illus. port. 1923)

The 150th anniversary of the founding of the Charleston (S. C.) Museum (1773); q.v.

- (1) **BRANNER, John C[asper].** Geological surveys in Arkansas. (In Jour. of Geol. v. 2, no. 8, p. 826-36. Nov.-Dec. 1894)

Historical account. See also Arkansas Geol. Surv. (1857)

- (2) ——— Bibliography of the geology of Arkansas. Little Rock, 1909. (In Geol. Surv. Arkansas. 1909. p. 97-164)

Arranged alphabetically by author. A previous bibliography is (In Arkansas Geol. Surv. Ann. Rept. 1891. v. 2, p. 319-40). See also Arkansas Geol. Surv. (1857)

BRENDEL, Frederick. Historical sketch of the science of botany in North America from 1635 to 1840. (In Amer. Naturalist. v. 13, p. 754-71. Dec. 1879)

Continued: For 1840-1858 in Amer. Naturalist. v. 14, p. 25-38. Jan. 1880.

"A history of the science of botany in N. A. means not in this sketch a history of that science in all its branches, but rather the history of traveling and local collectors, and of descriptive botany, so far as it concerns American plants." Preface.

Excellent critical study of the work of native and foreign botanists and explorers, divided into three periods: 1635-1800; 1800-1840; & 1840-1858.

- (1) **BREWER, William Henry.** The debt of the century to learned societies. (In Conn. Acad. A. & Sc. Trans. v. 11, pref. p. 46-53. 1901)

The period treated is 1799 to 1899. Read before the Society Oct. 11, 1899, at the centenary celebration of the founding of the Society.

- (2) ——— List of persons who have made botanical collections in California. Cambridge, Mass., 1880. (In California. Geol. Surv. Botany. v. 2, p. [553]-59)

Brief notes of the chief explorers & collectors.

BRITISH MUSEUM (NATURAL HISTORY). LIBRARY. Catalogue of the books, manuscripts, maps, drawings in the British Museum of Natural History. London, Printed by order of the Trustees, 1903-15. 5 v. 4°.

v. 1, A-D; v. 2, E-K; v. 3, L-O; v. 4, P-Sn; v. 5, So-Z. Compiled by Dr. Henry Woodward, J. L. Fletcher, J. Britten, and F. J. Bell. Contains 60,000 entries. American publications very numerous, exceeded by few American libraries.

- (1) BRITTON, Nathaniel Lord. Botanical gardens in the United States and British America. (In Science. n. s. v. 4, p. 290-93. Sept. 4, 1896)

Brief histories of early and recent gardens. Rd. before Amer. Assoc. Adv. Sc., Aug. 1896. In its Proc. v. 45, p. 180-84. Jan. 1, 1897. Also repr. in Torrey Bot. Club. Bull. v. 23, 341-45. Sept. 1896.

- (2) ——— A list of state and local floras of the United States and British America. N. Y. Apr.-July, 1890. (In N. Y. Acad. Sc. Annals. v. 5, p. 237-300)

Floras of U. S., p. 237-89; Canada, p. 289-99. Arranged (1) Geographically by states; (2) Chronologically under states and counties. Rd before the Society, Feb. 24, 1890.

- (1) BROADHEAD, G[arland] C[arr]. Missouri geological surveys: historical memoir. St. Louis, Mar. 1, 1886. (In Acad. Sc. St. Louis. Trans. v. 4, p. 611-24)

See also MISSOURI GEOL. SURV. (1853)

- (2) ——— Geological surveys of Missouri. N. Y., Southern Hist. Co., 1901. (In Encyclopaedia of history of Missouri. v. 3, p. 27-31)

See also MISSOURI GEOL. SURV. (1853)

BROWN, Addison. The Elgin Botanical Garden, its later history, and relation to Columbia College, and the Vermont land controversy. (In N. Y. Bot. Gard. Bull. v. 5, no. 18, p. 319-72. Feb. 1909)

The story of the Garden after the disposition of it by Hosack to the state of New York.

See also Elgin Bot. Gard. (1801)

BROWN, Samuel Boardman. A bibliography of works upon the geology and natural resources of West Virginia from 1764 to 1901 and also a cartography of West Virginia from 1737 to 1901. Morgantown, W. Va., 1901. 85 p. (In West Virginia. Geol. Surv. Bull. no. 1)

Entries arranged chronologically. Author index.

See also Virginia Geol. Surv. (1835)

BRUSH, George J[arvis]. . . . A sketch of the progress of American mineralogy. Salem, Mass., 1883. (In Amer. Assoc. Adv. Sc. Proc. for 1882. v. 31, p. 1-28)

The Presidential Address, dealing principally with the pioneer workers between 1840 and 1845.

Repr. in Pop. Sc. Mthly. v. 21, p. 795-809. Oct. 1882.

BUCKLEY, S[amuel] B[otsford]. History of the survey of Texas. Houston, 1874. (In his First Ann. Rept. Geol. & Agric. Surv. Texas. p. 6-13)

Somewhat biased account of the early years of the TEXAS GEOL. SURV. (1858), q.v.

BURGESS, Edward, and EMERTON, James H[enry]. The Spiders of the United States: a collection of the arachnological writings of Nicholas Marcellus Hentz, M.D.; ed. by Edward Burgess with notes and descriptions by James H. Emerton. Bost. 1875. 13 + 171 p. 20 pl. [353 fig.] (In Bost. Soc. Nat. Hist. Occas. Papers. v. 2)

Biography of Hentz, pref. p. 8-11; List of writings, pref. p. 12-3.

(1) BURNS, Frank Lorenzo. The ornithology of Chester County, Pennsylvania. Bost. Badger, 1919. 122 p. pl.

Includes historical sketch, bibliography and brief biographical notices.

(2) ————— Miss Lawson's recollections of ornithologists. (In Auk. v. 34, p. 275-82. July, 1917)

BUTLER, A[mos] W[illiam]. Bibliography of Indiana ornithology. Brookville, Ind., 1894. (In Indiana Acad. Sc. Proc. 1893. p. 108-16)

Chronological list.

Repr. in (Indiana. Dept. Geol. & Nat. Resources. 22d Ann. Rept. 1897. p. 532-48)

CALKINS, William Wirt. Bibliography of North American lichenology. Chicago, Apr. 1896. (In Chicago Acad. Sc. Geol. & Nat. Hist. Surv. Bull. no. 1, p. 44-50)

Alphabetically by authors.

CALL, R[ichard] Ellsworth. A contribution to a knowledge of Indiana Mollusca. Brookville, Ind., 1894. (In Indiana Acad. Sc. Proc. 1893. p. 140-45)

Classified bibliography, p. 142-45.

CARNEGIE LIBRARY OF PITTSBURGH. Men of science and industry: a guide to the biographies of scientists, engineers, inventors and physicians, in the Carnegie Library of Pittsburgh. Pittsburgh, 1915. 189 p.

Alphabetically by biographee. Contains the names of a fairly large number of naturalists, with references to easily accessible material, only.

Classified list of names, p. 166-89.

CARPENTER, Philip P[earsall]. Report on the present state of our knowledge with regard to the Mollusca of the West Coast of North America. London, 1857. (In British Assoc. Adv. Sc. Rept. for 1856. p. 159-368)

Suppl. in (Smith. Inst. Misc. Coll. v. 10, p. 517-686). Written Aug. 1, 1864.

Cont. in DALL, W. H., (3), q.v.

CARUS, J[ulius] Victor, and ENGELMANN, Wilhelm. Bibliotheca zoologica-verzeichniss der schriften über zoologie, welche in den periodischen werken enthalten und vom jahre 1846-1860 selbständig erschienen sind, mit einschluss der allgemein-naturgeschichtlichen, periodischen und palaeontologischen schriften . . . Leipzig, Verlag von W. Engelmann, 1861. 2 v. (In Engelmann's Bibliotheca historico-naturalis. Suppl.)

v. 1, 10 + p. 1-950; v. 2, 24 + p. 951-2144.

Subject index, v. 2, p. 1699-1823; Author index, v. 2, p. 1823-2144. A classified list. American serials and journals, listed, v. 1, p. 106-9.

Continued for 1861-1880 by O. Taschenberg. *Bibliotheca Zoologica*, 2-3. Leipzig, 1889-1890.

CATLOW, Agnes, and REEVE, Lovell. *The conchologist's Nomenclator: a Catalogue of all the recent species of shells, included under the sub-kingdom 'Mollusca'; with their authorities, synonymes, and references to works where figured or described; by Agnes Catlow, assisted by Lovell Reeve.* London, Reeve Bros., 1845. 8+ 326 p.

"Plan adopted is that of an alphabetical list of species, in a systematic arrangement of genera." Preface.

(A) CENTURY of science in America with special reference to the American Journal of Science 1818-1918 . . . New Haven, Yale Univ. Press, 1918. 458 p. 22 port. facsim.

A reprint in book form, with portraits of the essays in the Centennial number of the AMERICAN JOURNAL OF SCIENCE (1818), q.v. For the contents of this volume and the original in (*Amer. J. Sc.* ser. 4, v. 46, p. 1-416. July, 1918), see *Amer. J. Sc.* (1818),: Bibliography: 1918, (1) & (2). See also the entries above and below under BARRELL, COE, DANA, E. S., GOODALE (1), GREGORY (1), LULL, PIRSSON, SCHUCHERT (1), SMITH, G. O.

[CHANNING, Walter. *A survey of the botany of the United States.*] (*In North Amer. Rev.* v. 13, (n. s. v. 4), p. 100-34. July, 1821)

Outlines the main achievements of American botany up to the year 1820. Included in a review of Jacob Bigelow's "*American Medical Botany.*" Bost. 1817-20. 3 v. (See Bibliography of Books: 1817)

CHENEY, L[ellen] S[terling]. *An historical review of the work done on the flora of the Territory now included within the limits of Wisconsin.* Milwaukee, Wis., December, 1900 & January, 1901. (*In Pharmaceutical Review.* v. 18, no. 12, p. 557-65; & v. 19, no. 1, p. 2-15)

CHRISTENSEN, Carl. *Index Filicum sive enumeratio omnium generum specierumque filicum et hydropteridum ab anno 1753 ad finem anni 1905 descriptorum adjectis synonymis principalibus, area geographica, etc.* Copenhagen Hafniae, H. Hagerup, 1906. [60] + 744 p.

Divided into three principal parts:

Pt. 1 A systematical enumeration of the genera. pref. p. 11-60.

Pt. 2 An alphabetical enumeration of the species and synonymys. p. 1-670.

Pt. 3 An alphabetical catalogue of literature. p. 671-744.

Supplement: 1906-1912. Copenhagen, 1913. [2 + 132 p.]

(1) CLARK, Josephine A[delaide]. *Catalogue of publications relating to entomology in the library of the United States Department of Agriculture prepared under the direction of the librarian.* Washington Gov't print. office, 1906. 562 p. (*In U. S. Dept. Agric. Library. Bull.* no. 55)

A classified list.

(2) ———. *Catalogue of the publications relating to botany in the library of the United States Department of Agriculture . . . Wash. Gov't print. office, 1902.* 242 p. (*In U. S. Dept. Agric. Library. Bull.* no. 42)

A classified list. Author list, p. 5-187; List of serials, p. 189-212; Subject index, p. 213-42.

- (1) CLARK, William Bullock. Historical sketch embracing an account of the progress of the investigation concerning the physical features and natural resources of Maryland. Baltimore, 1897. (In Maryland Geol. Surv. Rept. for 1897. v. 1, pt. 2, p. 43-138)
Contains bibliographical footnotes. See also MARYLAND GEOL. SURV. (1833)
 - (2) ——— Correlation papers: Eocene. Wash. Gov't print. office, 1891. 173 p. (In U. S. Geol. Surv. Bull. no. 83)
Historical sketch of the Atlantic and Gulf coast region. p. 17-37. Bibliography, p. 148-59.
 - (3) ——— The Upper Cretaceous deposits of Maryland: historical review and bibliography. Baltimore, 1916. (In Maryland Geol. Surv. Upper Cretaceous. p. 34-50)
History, p. 34-9; Bibliography, chronologically arranged, p. 39-50.
 - (4) ——— Historical sketch of the Cretaceous and Tertiary formations of New Jersey . . . Trenton, N. J., 1893. (In N. J. State Geol. Rept. for 1892. p. 172-77)
- CLARK, William Bullock, and MARTIN, George Curtis. The Eocene deposits of Maryland: historical review and bibliography. Baltimore, 1901. (In Maryland Geol. Surv. Eocene. p. 24-43)
Historical review, p. 24-31; Bibliography, alphabetically arranged by author, p. 31-43.
- CLARK, William Bullock, and MATHEWS, Edward B[ennett]. History of investigations regarding the physical features of the state. Baltimore, 1906. (In Maryland Geol. Surv. Rept. v. 6, p. 40-54)
See also MARYLAND GEOL. SURV. (1833)
- CLARK, William Bullock, and MILLER, Benjamin Le Roy. Geological literature of the Virginia coastal plain. Charlottesville, Va., 1912. (In Va. Geol. Surv. Bull. no. 4, p. 19-45)
Chronologically arranged and well annotated.
- CLARK, William Bullock, and TWITCHELL, Mayville W. Bibliography of the Mesozoic and Cenozoic Echinodermata of the United States. Wash. Gov't print. office, 1915. (In U. S. Geol. Surv. Monographs. v. 54, p. 14-20)
Chronologically arranged. Previous list by CLARK (in U. S. Geol. Surv. Bull. no. 97, 1893, p. 15-20)
- (1) CLARKE, John M[ason]. The reincarnation of James Eights, Antarctic explorer. (In Scientific Monthly. v. 2, no. 2, p. 189-202. Feb. 1916)
A review of the life and labors of a neglected American palaeontologist, and the story of a little-known expedition.
 - (2) ——— List of publications relating to the geology and palaeontology of the state of New York, 1876-93. Albany, N. Y., 1894. (In N. Y. State Mus. Rept. for 1893. v. 47, p. 753-91)
Repr. in N. Y. State. Geologist's Rept. for 1893. Albany, 1894. v. 13, p. 559-97. See also NATURAL HISTORY SURV. OF N. Y. (1836)

- (3) ——— James Hall, of Albany, geologist and palaeontologist, 1811–1898. Albany, S. C. Bishop, 1921. 565 p. 11pl. front. port.
A comprehensive study of the labors of the pioneer American workers and of one of the leading lights.
- CLEMENTS, F[rederic] E[dward]. A preliminary list of the botanical expeditions in Nebraska: 1803–1893. Lincoln, Neb., 1894. (In Univ. Nebraska. Bot. Surv. Nebraska. Rept. for 1893. p. 39–42)
Repr. as "History of the investigation of the Flora of Nebraska." (In Pound, Roscoe & Clements, F. E. Phytogeography of Nebraska. Lincoln, 1900. p. 17–22)
- CLINTON, De Witt. An introductory discourse . . . delivered before the Literary and Philosophical Society of New York, on the fourth of May, 1814. N. Y., 1815. 4°. (In Literary & Philosophical Soc. N. Y. Trans. v. 1, p. [19]–184)
Rev. in North Amer. Rev. v. 1, p. 390–402. 1815. Two other ed. of the Discourse were pub. as separates:
(1) N. Y. Printed by Van Winkle & Wiley, 1815. 160 + (1) p. 4°. (2) N. Y. Published by David Longworth, 1815. 148 p. 8°. Discourse treats of the scientific achievements of the Societies up to that time and of what had been accomplished in natural history.—see p. 49–72, 81–173 (of Trans.); p. 33–57, 64–149 (of Van Winkle ed.); p. 21–36, 41–138 (of Longworth ed.) See also Literary & Philosophical Soc. N. Y. (1814)
- COBB, Collier. Some beginnings in science. (In Popular Sc. Monthly. v. 49, p. 763–71. Oct. 1896)
With especial reference to the contributions of the workers at the University of North Carolina, and particularly Denison Olmsted and Elisha Mitchell.
- COCKRILL, Elizabeth. Bibliography of Tennessee geology, soils, drainage, forestry, etc., with subject index. Nashville, 1911. 119 p. (In Tennessee. Geol. Surv. Bull. no. 1)
Extract (B), from Bull. no. 1, "Geological work in Tennessee."
Bibliography, alphabetically by authors, p. 5–79. Index, alphabetically by subject, p. 81–111.
See also TENNESSEE GEOL. SURV. (1831)
- COCKS, R[eginald] S. Historical sketch of the botany of Louisiana. New Orleans, 1900. (In Louisiana Soc. Naturalists. Proc. 1897–99. p. 69–74)
Com. to the Soc., Feb. 3, 1899. Bibliography, p. 74. Review of the principal contributions.
- COE, Wesley R[oswell]. A century of zoology in America. (In Amer. J. Sc. ser. 4, v. 46, art. 11, p. 355–98. July, 1918)
Repr. in (A) CENTURY of science in America. New Haven, 1918. ch. 12, p. 391–438. Excellent survey of the contributions to zoology by Americans, with incidental digressions on the development of museums and American scientific periodicals. See CENTURY, above.
- COGSWELL, William. Literary and scientific associations in the United States. Boston, Nov. 1842. (In Amer. Quart. Register. v. 15, p. 175–81)
Extracted from (NORTHERN ACAD. ABTS & SC., Hanover, N. H. First annual Report. 1842. p. 12–26). Enumeration, with brief sketches of the principal contemporary institutions of the day.

COLLINS, Frank S[hiple]. The botanical and other papers of the Wilkes Exploring Expedition. Bost. & Providence, April, 1912. (In *Rhodora*. v. 14, no. 160, p. 57-68)

A bibliographical discussion of the various volumes published of the WILKES EXPLORING EXPEDITION (1838), q.v.

COLTON, Harold Sellers. Peale's Museum. (In *Pop. Sc. Mthly.* v. 75, p. 221-38. Sept. 1909)

The most important private museum of the early 19th century located in Philadelphia and for a time located in the rooms of the Amer. Phil. Soc. (1769), q.v. See also Peale's Philadelphia Museum (1784)

- (1) COOK, George H[ammell]. Address . . . on the International Geological Congress, and our part in it as American geologists. Salem, Mass., 1889. (In *Amer. Assoc. Adv. Sc. Proc.* 1888. v. 37, p. 159-77)

Vice-presidential Address, containing a résumé of the history of American geology during the past century.

- (2) ——— Sketch of the surveys made previous to 1863. Trenton, 1864. (In his *Ann. Rept. for 1863. Geol. Surv. N. J.* p. 3-5)

Résumé also in his *Geol. Rept. (Final)*, 1868, pref. p. 7-8. See also NEW JERSEY GEOL. SURV. (1835)

- (3) ——— Historical notes on the Geological Surveys of New Jersey. Trenton, 1885. (In *N. J. Geol. Surv. Ann. Rept.* 1885. p. 152-209)

Comprehensive sketch. See also NEW JERSEY GEOL. SURV. (1835)

COOPER, Lane. Travellers and observers: 1763-1846. N. Y. G. P. Putnam, 1917. (In *The Cambridge History of American Literature*. v. 1, book 2, ch. 1, p. 185-214)

Historical sketch, with emphasis on the literary contributions. Bibliography, accompanying the essay, p. 468-490.

CORY, Charles B[arney]. The birds of Illinois and Wisconsin. Chicago, 1901. (In *Field Mus. Nat. Hist. Zool. Ser.* v. 9, p. 740-50) Pub. no. 131.

Bibliography, chronologically arranged, p. 740-50.

- (1) COUES, Elliott. Bibliographical appendix: list of faunal publications relating to North American ornithology . . . Wash. 1878. (In *U. S. Geol. & Geogr. Surv. of the Territories. Misc. Pub.* no. 11, p. 567-784)

Pt. 1 This is part 1 of his intended universal Bibliography of Ornithology which was never completed. It contains 1000 titles arranged chronologically, with alphabetically by authors sub-arrangement. Index: p. 747-84.

Pt. 2-3 Second and Third Instalments. (In *U. S. Geol. & Geogr. Surv. of the Territories. Wash.* 1879-80. *Bull.* v. 5, no. 2, p. 239-330; & v. 5, no. 4, p. 521-1066. Sept. 6, 1879 & Sept. 30, 1880)

Pt. 4 Fourth Instalment: British birds . . . (In *U. S. Nat. Mus. Proc.* v. 2, p. 359-477. 1880)

Repr. (In *Smith. Inst. Misc. Coll.* v. 19, pt. 2, p. 359-477. 1880)

- (2) ——— Historical preface. (In his *Key to North American birds* . . . 5th ed. Bost. [1903]. v. 1, preface. p. [11]-30)

Not in the first ed., 1872. In 2d ed., 1884, and in 3d ed., 1887, on pref. p. [11]-30. In 4th ed., 1892, on pref. p. [5]-30.

Excellent history of the progress of the study of ornithology in the U. S. Divided into periods named after the most prominent ornithologists who dominated the respective periods.

- (3) ——— An account of the various publications relating to the travels of Lewis and Clarke, with a commentary on the zoological results of their expedition. (In U. S. Geol. & Geogr. Surv. of Territories. Bull. v. 1, ser. 2, no. 6, p. 417-44. Feb. 8, 1876)

Pt. 1 Bibliographical; p. 417-30.

2 Zoological; p. 430-43.

Considers the pirated, spurious, stolen editions, etc., translations, etc. Changes and corrections are given in his "Bibliographical Introduction" to his N. Y. 1893, ed. of the LEWIS & CLARK EXPED. (1804), q.v., in v. 1, pref. p. 107-32.

- (4) ——— . . . Bibliography of the Explorations of Z. M. Pike . . . N. Y. 1895. (In Coues, Elliott, ed. Expeditions of Z. M. Pike. v. 1, pref. p. 33-50)

Discussion of the various editions of the Narrative by Pike. See PIKE'S EXPLORE. (1805)

COUES, Elliott, and GILL, Theodore Nicholas. Bibliography of Mammals . . . see GILL & COUES.

COULTER, John M[erle]. A century of botany in Indiana. [Indianapolis], 1917. (In Indiana Acad. Sc. Proc. for 1916. p. 236-60)

Bibliography, p. 241-60. Alphabetically by authors.

COVILLE, Frederick V[ernon]. Early botanical activity in the District of Columbia. (In Columbia Hist. Soc. Wash., D. C., 1902. Records. v. 5, p. 176-94)

Read before the Society, May 6, 1901. Concerned mainly with the activities of the Washington Bot. Soc. (1817), & the Washington Botanic Club (1825), q.v.

- (1) CRESSON, Ezra T[ownsend]. A history of the American Entomological Society, Philadelphia, 1859-1909, prepared by the request of the Society . . . with an introduction by the Rev. Henry C. McCook. Phila. The American Entomological Society, 1909. 60 p. 3 port.

See also Ent. Soc. Phila. (1859)

- (2) ——— Bibliography of the Hymenoptera of America north of Mexico. Phila. Amer. Ent. Soc., 1887. (In Amer. Ent. Soc. Trans. Suppl. Volume, 1887. pt. 1, p. 315-37)

Arranged alphabetically by author, p. 315-28; Titles of separate works, p. 333-37.

CROOK, A[lja] R[obinson]. The history of the Illinois State Museum of Natural History. (In Amer. Assoc. Mus. Proc. for 1907-08. v. 1, p. 159-70)

DALE, T[homas] Nelson. Mount Greylock: its structural and areal geology. Wash. Gov't print. office, 1894. (In U. S. Geol. Surv. Monog. v. 23)

History and Bibliography of geological explorations to Greylock, p. 131-33.

- (1) DALL, William Healey. Some American conchologists. Wash., 1888. (In Biol. Soc. Wash. Proc. v. 4, p. 95-134, 3 port.)
The Presidential Address, Jan. 28, 1888. Excellent biographies of 18 active workers, with portraits of Stimpson, Lea & Couthouy.
 - (2) ——— Spencer Fullerton Baird: a biography, including selections from his correspondence with Audubon, Agassiz, Dana, and others. Phila. & Lond., Lippincott, 1915. 16 + 462 p. illus. pl. port.
Several chapters on natural history, and the Smithsonian Institution, before 1865.
 - (3) ——— Material towards a bibliography of publications on the Post-Eocene marine Mollusks of the northwest coast of America, 1865-1908. Wash. Gov't print. office, 1909. (In U. S. Geol. Surv. Prof. Paper. 59, p. 192-216)
Includes a number of entries omitted in CARPENTER, P. P. (q.v. above)
- DALL, William Healey, and HARRIS, Gilbert Dennison. . . . Correlation papers: Neocene. Wash. Gov't prin. office, 1892. 349 p. (In U. S. Geol. Surv. Bull. no. 84)
Summary of our knowledge of the Neocene considered by states. p. 32-317.
Cenozoic nomenclature of U. S. excluding the Laramie, p. 320-38.
- DANA, Edward Salisbury. The American Journal of Science: 1818-1918. (In Amer. J. Sc. ser. 4, v. 46, no. 271, art. 1, p. 1-44. July, 1918)
Repr. in (A) CENTURY of Science in America. New Haven, 1918. ch. 1, p. 13-59. See CENTURY, above.
Excellent historical survey of the most important scientific journal in the history of the development of American science. See AMERICAN JOURNAL OF SCIENCE (1818)
- (1) DANA, James D[wight]. . . . [On American geological history] . . . Cambridge, Mass., 1856. (In Amer. Assoc. Adv. Sc. Proc. for 1855. v. 9, p. 1-36)
Repr. in Amer. J. Sc. ser. 2, v. 22, p. 305-34. Nov. 1856.
Rd. before Assoc. Aug. 1855. A discussion of the researches in geology up to that time.
 - (2) ——— Berkshire geology. Pittsfield, Mass., 1886. (In Berkshire Hist. & Sc. Soc. Papers. 1886. p. 1-25)
Historical sketch of Berkshire geology, p. 1-9. Rd. before Society, Feb. 1885.
 - (3) ——— The history of Taconic investigation previous to the work of Professor Emmons. (In Amer. J. Sc. ser. 3, v. 31, no. 185, p. 399-401. May, 1886)
Rd. before Berkshire Hist. Soc., Feb. 1885.
List of papers on Taconic System, see also Amer. J. Sc. ser. 3, v. 19, p. 153-55. 1880.
- DARLINGTON, William. Progress of botany in North America. (In his Memoirs of Bartram & Marshall. 1849. p. [17]-33)
Authoritative account of the history of American botany, from colonial times to 1850, by one of its most enthusiastic devotees. The "Memoirs" is also valuable for the light it throws on the condition of botany during colonial times, as viewed in the letters of Bartram & Marshall with their English and other European contemporaries.

- (1) DARTON, Nelson Horatio. . . . Catalogue and index of contributions to North American geology; 1732-1891. Wash. 1896. 1045 p. (In U. S. Geol. Surv. Bull. no. 127)

"Entries are comprised in two classes, which are arranged in single alphabetic sequence. (1) Principal entries . . . consist of full titles of separate contributions, classified by authors, with chronologic sub-arrangement . . . (2) Subject index—references . . . are geographic, stratigraphic, and miscellaneous geologic headings, under which are listed condensed titles of papers, and the author's name for cross-reference to the principal entry."—Preface.

The standard bibliography of the subject and the forerunner of a series which brings the material up-to-date.

See WEEKS, F. B., (2), (3), (4) & NICKLES, J. M.

- (2) ————— Surveys, U. S. governmental. N. Y., 1920. (In *Encyclopaedia Americana*. v. 26, p. 98-102)

Chronological list.

- (1) DAY, Mary A[nna]. The local floras of New England. (In *Rhodora*. Bost. 1899. v. 1, p. 111-20, 138-42, 158, 174-78, 194-96, 208-10)

Concluded in v. 2, p. 73-4. Mar. 1900. Contains 258 titles. By states with sub-arrangement by counties. Repr. Cambridge, 1900. 28 p.

- (2) ————— The herbaria of New England. Bost. & Providence, 1901. (In *Rhodora*. v. 3, p. 67-71, 206-8, 219-22, 240-44, 255-62, 281-83, 285-88. Apr., July, Aug., Sept., Oct., Nov. & Dec. 1901)

Arranged alphabetically by the names of the herbaria.

- DEAN, Bashford, and EASTMAN, Charles Rochester. A bibliography of fishes, by Bashford Dean; enlarged and edited by Charles Rochester Eastman . . . N. Y. American Museum Natural History, 1916-23. 3 v. 4°.

v. 1 Authors —A-K 718 p. 1916.

v. 2 " —L-Z 702 p. 1917.

v. 3 Subject index [16] + 707 p. 1923.

(1) Titles of Pre-Linnaean publications, p. 204-338.

(2) General bibliographies which include references to fishes, p. 339-42.

(3) Voyages and expeditions which relate to fishes, p. 343-47.

(4) List of periodicals relating to fish & fish culture with the abbreviations herein used, p. 348-53.

(5) Addenda to titles contained in v. 1-2, p. 4-203.

(6) Subject Index, p. 361-707.

v. 3 extended and edited by Eugene Willis Gudger with the coöperation of Arthur Wilbur Henn. A monumental bibliographical achievement.

- (1) DEKAY, James E[llsworth]. Anniversary address on the progress of the natural sciences in the United States, delivered before the Lyceum of Natural History of New York, February, 1826. N. Y. G. & C. Carvill, 1826. 78 p.

Able review of the labors of American naturalists in the fields of mineralogy, geology, botany and zoology; with an account of the achievements of federal exploring expeditions up to that date.

- (2) ————— Historical progress of ichthyology in the United States . . . Albany, 1842. (In *Nat. Hist. N. Y. Div. 1: Zoology*. pt. 3, *Fishes*. pref. p. 3-8)

Brief survey, with especial reference to N. Y. State.

DERBY, George, ed. Americans pre-eminent in the world of letters, arts and sciences and the liberal professions, arranged chronologically. N. Y., 1906. (In National Cyclopaedia of American Biography. Conspectus & Index Volume. p. 153-85)

Useful list, with references to brief biographies in the volumes of the Cyclopaedia proper. Enumeration of anthropologists, p. 153; botanists, p. 162; biologists, p. 162; entomologists, p. 167; ethnologists, p. 167; explorers and pioneers, p. 167-68; geologists, p. 168; mineralogists, p. 172-73; naturalists, p. 174; ornithologists, p. 174-75; palaeontologists, p. 175; physicians and surgeons, p. 176-78; scientists, p. 180; zoologists, p. 185.

DERBY, Alice Greenwood, and PROSSER, (Mrs) Mary Wilson. . . . A bibliography of Ohio geology. . . . Columbus, Ohio, Aug. 1906. 332 p. (In Geol. Surv. of Ohio. Bull. ser. 4, no. 6. 2 parts)

Pt. 1 A subject index to the publications of the Geological Survey of Ohio, from its inception to and including Bull. 8 of the fourth series, by A. G. DERBY. p. 15-233.

Pt. 2 A bibliography of the publications relating to the geology of Ohio, other than those of the State Geological Survey, by M. W. PROSSER, p. 234-332.

DEWEY, Chester. Address at the inauguration of the State Geological Hall, August 27, 1856, Albany, N. Y. . . . on the early history of geology in the United States. . . . Albany, N. Y., 1857. (In N. Y. State Mus. 10th Ann. Rept. for 1856. p. 13-9)

The Museum, then known as the N. Y. STATE CABINET OF NATURAL HISTORY (1843), q.v.

DOCK, M[ira] L[ord]. Bartram's Botanic Garden. (In Garden & Forest. v. 9, p. 121, 122-24. Mar. 25, 1886)

Historical and biographical sketch of the famous garden and its founder.

DOW, Charles Mason. Anthology and bibliography of Niagara Falls. . . . Albany, The State of New York. 2 v. fronts. maps. Pl. v. 1, 16 + p. 1-689; v. 2, p. [691]-1423.

Bibliography, arranged alphabetically, v. 2, p. 1269-1423.

Flora and Fauna, v. 1, p. 439-91.

Science, geology and physics, v. 1, p. 495-689.

DUCATEL, J[ulius] T[imoleon]. History of the topographical and geological surveys. Annapolis, Md., 1840. (In his Rept. Geol. Maryland for 1839. p. 3-15)

See also MARYLAND GEOLOGICAL SURVEY (1833)

DUDLEY, William Russel. . . . The Cayuga flora. . . . Ithaca, N. Y., 1886. 30 + 132 + 6p. (In Cornell Univ. Bull. (Science). v. 2)

Sketch of the botanical explorations in Cayuga County, N. Y., pref. p. 21-4.

DWIGHT, S[ereno] E[dwards]. Notice of scientific societies in the United States. (In Amer. J. Sc. v. 10, no. 2, p. 369-76. Feb. 1826)

Notice of 29 contemporary institutions engaged in the diffusion of knowledge in the natural sciences. One of the earliest lists.

DYAR, Harrison G[ray]. A list of North American Lepidoptera and key to the literature of the order of insects, by H. G. Dyar assisted by C. H. Fernald,

George D. Hulst and August Busck. Wash. Gov't printing office, 1902. 19 + 723 p. (In U. S. Nat. Mus. Bull. no. 52)

Index to specific, generic and family names, p. 583-723.

EDWARDS, Henry. Bibliographical catalogue of the described transformations of North American Lepidoptera. Wash Gov't printing office, 1889. 147 p. (In U. S. Nat. Mus. Bull. no. 35)

EIGENMANN, Carl H. Bibliography of Indiana fishes. Brookville, Indiana, 1894. (In Indiana Acad. Sc. Proc. 1893. p. 71-6)

Chronological list.

ELLIS, Mary. . . . Index to publications of the New York State Natural History Survey and New York State Museum: 1837-1902; also including other New York publications on related subjects. Albany, Univ. State N. Y., June, 1903. (In N. Y. State Mus. Bull. no. 66. Misc. no. 2, p. 239-653)

Bull. no. 288 of Univ. State N. Y.

An exceptionally fine and accurate index.

List of publications, p. 241-72; Author index, p. 273-303; Subject index, p. 304-526; Index to descriptions of genera and species of fossils (prepared under direction of J. M. CLARKE), p. 527-693.

See also NAT. HIST. SUBV. N. Y. (1836); & N. Y. STATE CAB. NAT. HIST. (1843)

EMERSON, Benjamin Kendall. Historical sketch [of the geology and mineralogy] of Old Hampshire County, Mass. . . . Wash. Gov't print. office, 1898. (In U. S. Geol. Surv. Monographs. v. 29. p. 2-8)

Old H. Co., comprises present Hampshire, Hampden & Franklin Counties. See also U. S. Geol. Surv. Bull. no. 126.

EMMONS, S[amuel] F[ranklin]. The geology of government explorations. (In Science. n. s. v. 5, no. 105 & 106, p. 1-15, 42-51. Jan. 1 & 8, 1897)

An historical sketch, treated chronologically, of the federal explorations which have contributed to a further knowledge of geology. First part deals with explorations up to 1865.

The Presidential Address before the Geol. Soc. Wash. Pub. Wash. 1897. 39 p.

(1) ESSEX INSTITUTE. The first half-century of the Essex Institute, commemorated at Salem, March first and second, 1898. Salem, Jan.-June, 1898. 3 + p. 1-100, illus. pl. (In its Bull. v. 30, no. 1-6)

Repr. as a separate, Salem, 1898. 100 p.

(2) ESSEX INSTITUTE. An historical notice of the Essex Institute; Act of incorporation, constitution and by-laws, and a list of the officers and members. Salem, Mass., Printed by the Institute, Dec. 1865. 44 p.

History of the ESSEX COUNTY NAT. HIST. SOC. (1833), q.v., p. 8-11.
See also ESSEX INST. (1848)

EVANS, Charles. American bibliography: a chronological dictionary of all books, pamphlets and periodical publications printed in the United States of America, from the genesis of printing in 1639 down to and including the year 1820. Chicago, 1903-date. 8 v. 4°.

8 volumes thus far published carries the list down to 1793.

EVERMANN, Barton Warren. A century of zoology in Indiana, 1816-1916. Indianapolis, 1917. (In Indiana Acad. Sc. Proc. for 1916. p. 189-224)

A comprehensive historical view of the principal workers with brief biographical sketches, in which the various branches of zoological science are treated separately.

EVERMANN, B[arton] W[arren], and BUTLER, A[mos] W[illiam]. Bibliography of Indiana Mammals. Brookville, Ind., 1894. (In Indiana Acad. Sc. Proc. 1893. p. 120-24)

Entries arranged chronologically.

- (1) FAIRCHILD, Herman Le Roy. A history of the New York Academy of Sciences, formerly the Lyceum of Natural History . . . N. Y. Pub. by the author, 1887. 190 p.

Rd. in abstract before the Academy, May 10, 1886.

For contents, see N. Y. Lyc. Nat. Hist. (1817): Bibliography.

- (2) ——— Glacial geology in America. (In Amer. Geol. v. 22, no. 3, p. 154-89. Sept. 1898)

Vice-presidential address before the Amer. Assoc. Adv. Sc. Aug. 1898. Historical review of the subject. In its Proc. v. 47, p. 257-90. Salem, Mass., Dec. 1898.

See also MARTIN, D. S. Glacial geology. (In Pop. Sc. Mthly. v. 54, p. 356-61. Jan. 1899)

- (3) ——— The history of the American Association for the Advancement of Science. (In Science. n. s. v. 59, p. 365-69, 385-90, 410-15. Apr. 25, May 2 & 9, 1924)

Discusses (1) Origin & early events; (2) Meetings; (3) Membership.

Address at the 75th anniversary meeting of the Association held at Cincinnati, Dec. 29, 1923. See also Amer. Assoc. Adv. Sc. (1848)

FARLOW, W[illiam] G[ilson]. Bibliographical index of North American fungi. Wash. Carnegie Inst. Wash., Sept. 1, 1905. 35 + 312 p. (Carnegie Inst. Wash. Pub. no. 8)

v. 1, pt. 1—*Abrothallus*-*Badhamia*. Incomplete.

FARLOW, W[illiam] G[ilson], and TRELEASE, William. . . . A list of works on North American fungi. Cambridge, Mass., Library of Harvard Univ., 1887. 36 p. (In Harvard Univ. Library. Bibliog. Contrib. no. 25)

Supplement by FARLOW, in Bibliog. Contrib. no. 31. 9 p. Arranged alphabetically by authors.

FARRINGTON, Oliver C[ummings]. The rise of natural history museums. (In Amer. Assoc. Mus. Proc. 1915. v. 9, p. 36-53)

American museums discussed on p. 44-53. Repr. in Science. n. s. v. 42, p. 197-208. Aug. 13, 1915.

FAXON, Walter. Relics of Peale's Museum. Cambridge, Mass., July, 1915. (In Mus. Comp. Zool. Bull. v. 59, no. 3, p. 117-48)

Contains a good historical account of the Museum, and some of its contemporaries; with descriptions of the various specimens still extant. See also Peale's Museum (1784)

FAXON, Walter, and HOFFMANN, Ralph. The birds of Berkshire County, Massachusetts. Pittsfield, 1897. (In *Berkshire Hist. & Sc. Soc. Coll.* 1897. p. 107-66)

Chronological bibliography, p. 160-66.

[FEATHERSTONHAUGH, George William]. On the comparative encouragement given to the study of natural history in Europe and North America. (In *Monthly Amer. Jour. Geol. & Nat. Sc.* v. 1, no. 9, p. 391-407. March, 1832)

A plea for a greater public interest in matters scientific; and a survey of the state of American science at the time.

FEIPEL, Louis N. . . . The Wilkes Exploring Expedition: its progress through half a century: 1826-1876. Annapolis, Md., 1914. (In *U. S. Naval Inst. Proc.* v. 40, no. 5, p. [1823]-50. Sept.-Oct. 1840)

See the Wilkes Exploring Expedition (1838). Extended and very interesting history of the various phases of the Expedition.

FIELD, Thomas W[arren]. An essay towards an Indian bibliography, being a catalogue of books, relating to the history, antiquities, languages, customs, religion, wars, literature, and origin of the American Indians, in the library of Thomas W. Field with bibliographical and historical notes, and synopses of the contents of some of the works least known. New York, Scribner, Armstrong & Co., 1873. 4 + 430 p.

A dictionary alphabet of authors. Well annotated.

FINCH, John. Travels in the United States of America and Canada, containing some account of their scientific institutions, and a few notices of the geology and mineralogy of those countries. . . . London, Longman, Rees, 1833. 455 p.

Contemporary account by a visiting English naturalist during 1824 & 1825, who resided in the U. S. for some time. Replete with details of his meetings with the leading scientific men of the day.

FINK, B[ruce]. Two centuries of North American lichenology. Des Moines, 1904. (In *Iowa Acad. Sc. Proc.* for 1903. v. 11, p. 11-38)

A chronological study of the progress of American lichenology, treated by periods.

FORBES, S[tephen] A[lfred]. History of the former state natural history societies of Illinois. (In *Science* n. s. v. 26, p. 892-98. 1907)

See also *Illinois Nat. Hist. Soc.* (1858)

FORD, William E[benezer]. The growth of mineralogy from 1818 to 1918. (In *Amer. J. Sc.* ser. 4, v. 46, art. 8, p. 240-54. July, 1918)

Repr. (In *(A) Century of science in America.* New Haven, 1918. ch. 8, p. 268-83). See CENTUBEY, above.

(1) FOWLER, Samuel P[age]. A historical sketch: the Essex County Natural History Society and the Essex Institute. Salem, Mass., July-Dec. 1884. (In *Essex Inst. Bull.* v. 16, p. 141-45)

See also ESSEX CO. NAT. HIST. SOC. (1833), and the ESSEX INST., (1848), for a long period the most successful local society in the U. S. engaged in the promotion of knowledge in natural history matters.

- (2) ——— Ornithology of the United States, its past and present history. Salem, Mass., 1862. (In *Essex Inst. Proc.* v. 2, p. 327–34)
A rapid sketch.
- FOX, R[ichard] Hingston. Dr. John Fothergill and his friends: chapters in eighteenth century life. London, Macmillan, 1919. 24 + 434 p. port.
Fothergill corresponded with many American botanists, during colonial times. His relations with Bartram are treated on p. 159–73.
- FREMONT, John Charles. Memoirs of my life, including in the narrative five journeys of western exploration during the years 1842, 1843–4, 1845–6, –7, 1848–9, 1853–4. . . . N. Y. & Chicago, Belford, Clark, 1887. 19 + 655 p. front. pl. port. (In 2 v.)
See also FREMONT'S EXPED. TO MISSOURI RIVER & ROCKY MTS. (1842); FREMONT'S EXPED. TO OREGON & CALIFORNIA (1843) & FREMONT'S EXPED. TO CALIFORNIA (1845)
- FULLER, Myron L[eslie]. The geology of Long Island, New York. Wash. Gov't print. office, 1914. 16 + 231 p. 27 pl. (In U. S. Geol. Surv. Prof. Papers 82)
Development of the geologic literature on Long Island, p. 4–20. Treated chronologically with bibliographical references.
- (1) GAGER, C[harles] Stuart. The first Botanic Garden on Long Island. Brooklyn, N. Y., Oct. 1912. (In *Brooklyn Bot. Gard. Record.* v. 1, no. 4, p. 97–9, illus.)
An account of William Prince's Linnaean Botanic Garden founded in 1737 at Flushing, L. I. (now part of N. Y. City)
- (2) ——— A brief history of the Botanic Garden idea in Brooklyn. Brooklyn, N. Y., Oct. 1918. (In *Brooklyn Bot. Gard. Record.* v. 7, no. 4, p. 99–112, illus. pl.)
Chiefly an account of the formation of the Brooklyn Hunt Botanical and Horticultural Garden, founded in 1854, incorporated in 1855.
- GEARE, Randolph I[ltyd]. A list of the publications of the United States National Museum (1875–1900) including the Annual Reports, Proceedings, Bulletins, Special Bulletins, and Circulars, with index to titles. Wash. Gov't print. office, 1902. 7 + 168 p. (In U. S. Nat. Mus. Bull. no. 51)
List of publications, p. 1–130. Index, p. 131–68.
See also SMITHSONIAN INSTITUTION (1846)
Supplements: (1), 1901–1906. Wash. 1906. 40 p.
(2), 1906–1912. Wash. 1914. 41 + 7 p.
- GEE, Wilson. . . . South Carolina botanists: biography and bibliography. Columbia, S. C., Sept. 1918. 52 p. (In *Univ. South Carolina. Bull.* no. 72)
Repr. from the Sunday News of Charleston, 1909–1910. Brief biographical and bibliographical sketches of the principal workers, with portraits.
- GIEBEL, C[hristoph] G[ottfried Andreas]. Thesaurus ornithologiae: Repertorium der gesamten ornithologischen literatur und Nomenclator sammtlicher gattungen und arten der Vogel nebst Synonymen und geographischer Verbreitung. Leipzig, F. A. Brockhaus, 1872–77. 3 v.
v. 1, 1872, 9 + 868 p.

v. 2, 1875, 6 + 787 p.

v. 3, 1877, 6 + 861 p.

v. 1, p. 1-252. Repertorium ornithologicum.

v. 1, p. 253-868, & v. 2-3, Nomenclator ornithologicus N. A. ornithology, v. 1, p. 201-12.

- (1) GILL, Theodore Nicholas. The state ichthyology of Massachusetts. (In Science. n. s. v. 20, p. 321-38. Sept. 9, 1904)

Comprehensive historical sketch of the principal contributors and contributions. Delivered at Woods Hole, Mass., Aug. 3, 1904.

- (2) ——— Bibliography of East coast fishes. Wash. 1873. (In Smith. Inst. Misc. Coll. v. 14, p. 37-44)

Repr. from U. S. Commissioner Fish & Fisheries. Rept. for 1871-72. (1873). v. 1, p. 779-822. Alphabetically by authors.

- (3) ——— Bibliography of the fishes of the Pacific coast of the United States to the end of the year 1879. Wash. 1882. 73 p. (In Smith. Inst. Misc. Coll. v. 23)

Pub. as U. S. Nat. Mus. Bull. no. 11. Arranged chronologically. Very thorough enumeration.

GILL, Theodore Nicholas, and COUES, Elliott. . . . Material for a bibliography of North American Mammals. Wash. Aug. 1877. (In U. S. Geol. Surv. of the Territories. F. V. Hayden, U. S. Geologist-in-charge. Report. v. 11, appx. B, p. 951-1081)

Arranged under a number of general heads, and chronologically under these. Contains entries through 1874 inclusive.

GIRARD, Charles. American zoological, botanical and geological bibliography for the year 1851. (In Amer. J. Sc. v. 63, appx. 19 p. May, 1852)

Prepared at the request of the Smithsonian Institution through S. F. Baird. The earliest annual scientific bibliography published in the U. S. Appeared in Dec. 1852. Pub. by Smith. Inst., entitled: Bibliographia Americana historico-naturalis; or, Bibliography of American natural history for the year 1851. Wash. 1852. 64 p.

GLENN, L[eonidas] C[halmers]. The growth of our knowledge of Tennessee geology. Nashville, May, 1912. (In Tenn. Geol. Surv. Resources of Tenn. v. 2, no. 5, p. 167-219, port.)

Extended account of the contributions made to the state by the surveys under Troost and Safford, by the surveys since their day, and by miscellaneous workers. See also TENNESSEE GEOL. SURV. (1831)

- (1) GOODALE, George Lincoln. The development of botany as shown in this Journal; [since 1818]. (In Amer. J. Sc. ser. 4, v. 46, art. 12, p. 399-416. July, 1918)

Repr. in (A) CENTURY of science in America. New Haven, Yale Univ. Press, 1918. ch. 13, p. 439-58. Rapid review of the early papers, with especial stress on the work and contributions of Asa Gray, associate editor for many years. See CENTURY above.

- (2) ——— The floras of different countries. Cambridge, Mass., Library of Harvard Univ., 1879. 12 p. (In its Bibliog. Contrib. no. 9)

Repr. from Harvard Univ. Library Bull. no. 10-12. Floras of N. A., p. 5-6.

- (1) GOODE, George Brown. The beginnings of natural history in America. (In Biol. Soc. Wash. Proc. v. 3, p. 35-105. 1886)
 Repr. in (Smith. Inst. Ann. Rept. pt. 2. U. S. Nat. Mus. Ann. Rept. 1897. p. 355-406)—(Memorial of G. B. Goode). Presidential address delivered Feb. 6, 1886. The first of a magnificent series of papers on the history of American natural history and science generally, embodying excellent scholarship and many years of intensive research, a classic group of papers intended to show "the debt which the naturalists of the present owe to those of the past." Gives biographical sketches, critical analyses of reports, important books, traces the rise of progress of the various societies and scientific journals, etc. See below GOODE (2), (3), (4), (5), & (6).
- (2) ——— The beginnings of American science: the third century. (In Biol. Soc. Wash. Proc. v. 4, p. 9-94. 1888)
 Repr. in (Smith. Inst. Ann. Rept. pt. 2. U. S. Nat. Mus. Ann. Rept. 1897. p. 407-66)—(Memorial of G. B. Goode). Annual presidential address delivered Jan. 22, 1887.
- (3) ——— Museum—history and museums of history. (In Amer. Hist. Assoc. Papers. v. 3, no. 2, p. 251-75. 1889)
 Repr. in (Smith. Inst. Ann. Rept. pt. 2, U. S. Nat. Mus. Ann. Rept. 1897. p. 63-81)—(Memorial of G. B. Goode)
- (4) ——— The origin of the national scientific and educational institutions of the United States. (In Amer. Hist. Assoc. Papers. v. 4, no. 2, p. 93-202. Apr. 1890)
 Repr. in (Smith. Inst. Ann. Rept. pt. 2, U. S. Nat. Mus. Ann. Rept. p. 263-354)—(Memorial of G. B. Goode).
- (5) ——— The first national scientific Congress (Washington, April, 1844) and its connection with the organization of the American Association. (In Amer. Assoc. Adv. Sc. Salem, July, 1892. Proc. for 1891. v. 40, p. 39-47)
 Repr. in (Smith. Inst. Ann. Rept. pt. 2, U. S. Nat. Mus. Ann. Rept. 1897. p. 467-77)—(Memorial of G. B. Goode). This meeting was held under the auspices of the National Institution for the Promotion of Science (1840), q.v.
- (6) ——— The genesis of the United States National Museum. Washington, 1892. (In Smith. Inst. Ann. Rept. U. S. Nat. Mus. Ann. Rept. for 1891. p. 273-380)
 Account of the part played by the NATIONAL INSTITUTION FOR THE PROMOTION OF SCIENCE (1840), q.v., in laying the foundations of the National Museum.
 Repr. in (U. S. Nat. Mus. Ann. Rept. 1847. Wash. 1901. pt. 2, p. 83-191, port.)—Memorial of Goode.
- (7) ——— ed. The Smithsonian Institution: 1846-1896; the history of the first half-century; edited by G. B. Goode. Washington, The Smithsonian Institution, 1897. 856 p. pl. port. plan. 4°.
 A review of the various aspects and activities of the Smithsonian since its foundation, treated in separate chapters by the men most intimately associated with the respective departments of the Institution. For the Contents of the volume, see SMITHSONIAN INSTITUTION (1846): Bibliography: 1897.

- GORDON, Samuel G. The mineralogy of Pennsylvania. Phila. 1922. 255 p. (Ir Acad. Nat. Sc. Phila. Spec. Pub. no. 1)
 Historical outline, p. 5-7.
 Bibliography, p. 240-55.
- (1) GOULD, Augustus Addison. Notice of the origin, progress and present condition of the Boston Society of Natural History. Boston, Feb., 1842. (In Amer. Quart. Register. v. 14, no. 3, p. 236-41)
 This is reprinted under BOSTON SOCIETY OF NATURAL HISTORY (1830), q.v.: History.
- (2) ———. . . . A retrospective glance at the beginnings of natural history in this region. . . . (In Bost. Soc. Nat. Hist. Proc. v. 9, p. 335-40. Feb. 1865)
 Refers especially to the LINNAEAN SOCIETY OF NEW ENGLAND (1814), q.v.
- GRABAU, Amadeus W[illiam], and SHIMER, Hervey Woodburn. General bibliography of North American Invertebrate index fossils and faunas: 1832-1909. N. Y., 1910. (In their N. A. Index Fossils: Invertebrate. v. 2, appx. C. p. 714-802)
 A classified list.
- GRAEF, Edward L. Some early Brooklyn entomologists. Brooklyn, N. Y., June, 1914. (In Brooklyn Ent. Soc. Bull. v. 9, no. 3, p. 47-56)
 Brief historical and biographical notes of the leading early workers.
- GRAVES, Charles Burr, and others. History of botanical exploration in Connecticut. Hartford, 1910. (In Conn. Geol. & Nat. Hist. Surv. Bull. no. 14, p. 11-4)
 Brief account of the chief workers.
- GRAY, Arthur F. Bibliography of the conchology of Ohio. (In Cincinnati Soc. Nat. Hist. Jour. v. 6, no. 1, 39-53 Apr. 1883)
 Chronological arrangement of entries.
- (1) GRAY, Asa. . . . History of the botany of the Alleghany Mountains. . . . (In Amer. J. Sc. v. 42, no. 1, p. 1-12. Oct.-Dec. 1841)
 Included in a paper on a "Botanical excursion to the southern Alleghanies in N. C."
 Repr. in Gray's Sc. Papers. 1889. v. 2, p. 22-70. (Notes of excursion . . .)
- (2) ——— ed. Selections from the scientific correspondence of Cadwalader Colden with Gronovius, Linnaeus, Collinson, and other naturalists. (In Amer. J. Sc. v. 44, no. 1, p. 85-133. Jan. 1843)
 Colden was one of the leading colonial botanists.
- (3) ———. Remarks concerning the flora of North America. Salem, Mass., 1893. (In Amer. Assoc. Adv. Sc. Proc. for 1882. v. 31, p. 449-60)
 An historical sketch.
 Repr. in Amer. J. Sc. ser. 3, v. 24, p. 321-35. 1882 & in GRAY, Asa. Sc. Papers, 1889. v. 2, p. 243-56. Also in Bot. Gaz. v. 7, p. 129-35, 139-43. 1882.

- (4) ——— Letters of Asa Gray; edited by Jane Loring Gray. Bost. & N. Y., Houghton, 1893. 2 v. port.
v. 1, 368 p. v. 2, p. 369-833.
Bibliography, v. 22, p. 818-25.
- GREELY, Adolphus Washington. . . . Explorers and travellers. . . . N. Y., C. Scribner's Sons, 1893. 373 p. (Men of achievement)
2d ed. 1902. 373 p. Includes biographies of Lewis, Clark, Pike, Wilkes, Fremont, Kane, I. I. Hayes, E. K. Kane, Paul Du Chaillu.
- (1) GREGORY, Herbert E[rmest]. A century of geology—steps of progress in the interpretation of land forms. (In Amer. J. Sc. ser. 4, v. 46, art. 3, p. 104-32. July, 1918)
Repr. in (A) CENTURY of Science in America. New Haven, 1918. ch. 3, p. 122-52.
Chiefly a theoretical study. Has a good bibliography. See CENTURY above. See also his paper in Scientific Mthly. v. 12, no. 2, p. 97-126. Feb. 1921. (On the history of geology)
- (2) ——— Bibliography of the geology of Connecticut. Hartford, 1907. 123 p. (In Conn. State Geol. & Nat. Hist. Surv. Bull. no. 8)
Annotated list arranged alphabetically by authors. Subject index.
See also CONN. GEOL. SURV. (1835)
- GREGORY, Winifred. Bibliography of Minnesota mining and geology. Minneapolis, 1915. 157 p. (In Minn. Univ. School of Mines. Experiment Station. Bull. no. 4)
Bibliography, alphabetically by authors, 991 entries, p. 9-95; Subject index, arranged alphabetically, p. 97-157.
See also MINNESOTA GEOL. SURV. (1859).
- GREVE, Charles Theodore. The Cincinnati Society of Natural History. Cincinnati, 1904. (In his Centennial history of Cincinnati. v. 1, p. 903-4)
Account of the previous societies of natural history.
See also Western Mus. Soc. (1818) & Western Acad. Nat. Sc. (1835)
- GRIFFIN, Appleton Prentiss Clark. . . . Bibliography of American historical societies (the United States and the Dominion of Canada); 2d ed. revised and enlarged. Wash. 1907. 1374 p. (In Amer. Hist. Assoc. Ann. Rept. for 1905. v. 2)
1st ed. (in Ann. Rept. for 1890 & 1892. p. 161-267, 305-619). Repr. (in Ann. Rept. for 1897. p. 677-1236).
- GRINNELL, Fordyce, Jr. The development of California entomology. Brooklyn, N. Y., Oct., 1914. (In Brooklyn Ent. Soc. Bull. v. 9, no. 4, p. 67-73, port.)
Survey of the leading Californian workers, with several portraits.
- GRINNELL, Joseph. . . . A bibliography of California ornithology. . . . Santa Clara, Cal., May 15, 1909. 166 p. (In Cooper Ornith. Club of Cal. Pacific Coast Avifauna. no. 5)
Bibliography, chronologically arranged, p. 1-149. Index to authors, p. 150-53; Local lists, p. 154-55; Bird names, p. 157-66.

HAGEN, Hermann August. *Bibliotheca entomologica: die litteratur uber das ganze gebiet der Entomologie bis zum Jahre 1862.* Leipzig, G. Engelmann, 1862-63. 2 v.

Additions in *Berliner Ent. Zeitsch.* 15th Jahrgang, 1874. p. 209-26, & *Deutsch. Ent. Zeitsch.* 20th Jahrg. p. 145-60. & *Ent. Nachr.* 1881. p. 45-8, 163-70.

Continued for 1861-1880 by O. Taschenberg. *Bibliotheca Zoologica: 2-3.* Leipzig, 1889-90.

HALE, William Henry. *Early years of the American Association.* (In *Popular Sc. Monthly.* v.49, p. 501-7. Aug. 1896)

See also AMER. ASSOC. GEOL. & NAT. (1840) & AMER. ASSOC. ADV. SC. (1848)

HALL, Asaph. *Annual address of the President: American scientific societies.* (In *Philos. Soc. Washington. Bull.* v. 8, pref. p. 33-47. 1885)

Delivered December 5, 1885.

(1) HALL, James. *Note upon the history and value of the term Hudson River Group in American geological nomenclature.* Salem, Mass., 1878. (In *Amer. Assoc. Adv. Sc. Proc. for 1877.* v. 26, p. 259-65)

(2) ——— The New York Geological Survey. (In *Pop. Sc. Mthly.* v. 22, p. 815-25. Apr. 1883)

See also the NATURAL HIST. SURV. N. Y. (1836). Repr. from Public Service State N. Y. 1882. v. 2, p. 367-80.

(3) ——— The State Museum of Natural History. (In *Public Service State N. Y.* 1883. v. 3, p. 482-88)

See also N. Y. STATE CABINET NAT. HIST. (1843)

(4) ——— History and organization of the Geological Survey of Wisconsin. Madison, Jan. 1862. (In HALL, James, and WHITNEY, J. D. *Rept. on Geol. Surv. Wisconsin.* v. 1, pref. p. 9-19)

See also WISCONSIN GEOL. SURV. (1853)

HAMILTON, John, and HENSHAW, Samuel. *A list of some of the catalogues and local lists of North American Coleoptera.* Cambridge, Mass., 1891. (In *Psyche.* v. 6, p. 160-62, 188-93, 205-9)

Annotated bibliography arranged alphabetically by author with an index of localities.

HANKINSON, Tho[mas] L. *Progress of ornithology in Michigan.* Grand Rapids, Jan. 1897. (In *Michigan Ornith. Club. Bull.* v. 1, no. 1, p. 1-4)

Concise historical sketch.

HANKS, Henry G. *History of geological surveys of the state of California.* San Francisco, 1884. (In *California. State Mineralogist.* 4th Ann. Rept. 1883-84. p. 21-7)

See also California Geol. Surv. (1853)

HARRIS, Gilbert Dennison. *The Tertiary geology of southern Arkansas.* Little Rock, 1894. (In *Arkansas Geol. Surv. Ann. Rept. for 1892.* v. 2, p. 1-6)

Brief historical review.

HARRIS, Gilbert D[ennison], and VEATCH, A[rthur] C[lifford]. Historical review of the geology of Louisiana . . . Baton Rouge, La., 1899. (In Louisiana. Geol. Surv. Rept. for 1899. pt. 5, p. 11-44)

1st period: Earliest explorations to 1867, p. 11-23.

2nd " : Reconnaissance period—1867-1902; p. 23-38.

3rd " : Experiment stations; p. 39-44.

HARRISON, Ida Withers. The Transylvania Botanic Garden: a little known American enterprise of great historic, scientific, and educational interest; a study of "The Athens of the West"—Lexington, Kentucky, home of the first printing press, newspaper, public library, and University, west of the Alleghanies; a pioneer naturalist of a century ago and the Botanic Garden he sought to found. (In Jour. Amer. Hist. v. 7, no. 1, p. 901-9. Jan.-Mar. 1913)

See also Transylvania Bot. Garden (1824)

(1) HARSHBERGER, John William. The botanists of Philadelphia and their work . . . Phila. [Press of T. C. Davis & Sons] 1899. 12 + 457 p. col. front. pl. port.

p. 1-40, History of botany in Philadelphia.

p. 41-404, Biographies of botanists who have worked in and about Philadelphia. A comprehensive local history.

(2) ——— Philadelphia botanists commemorated in the names of plants. Wash., D. C., May, 1900. (In Plant World. v. 3, no. 5, p. 74-6.)

(1) HASSE, Adelaide R[osalie]. Reports of explorations printed in the documents of the United States government (Contribution towards a bibliography). Wash. Gov't print. office, 1899. 90 p.

List arranged alphabetically, including names of explorers and subjects. Full bibliographical references.

(2) ——— Index of economic material in the documents of the states of the United States. Wash. Carnegie Inst. Wash. 1907-20. 15 v. in 13 pts. 4°. (Carnegie Inst. Wash. Pub. no. 85, pt. 1-13)

Excellent and useful work, containing volumes for the following states, with their respective dates of publication:

(1) Maine, May, 1907; (2) N. H., May, 1907; (3) Vt., Sept. 1907; (4) N. Y., Nov. 1907; (5) B. I., Feb. 1908; (6) Mass., May, 1908; (7) Cal., Dec. 1908; (8) Ill., July, 1909; (9) Ky., Jan. 1910; (10) Del., Apr. 1910; (11) Ohio, 2v., 1912; (12) N. J., 1915; (13) Pa., 2v., 1919-20.

Discontinued with volume on Pa. Material on Geological surveys, etc., under caption "Natural resources" in early volumes, and "Geology" in the later ones.

[HAWKS, Emma Beatrice]. . . . Catalogue of publications relating to forestry in the Library of the Department of Agriculture, prepared in the department with the co-operation of the Forest Service. Wash. Gov't print. office, 1912. 302 p. (In U. S. Dept. Agric. Library. Bull. no. 76)

A classified list which supersedes no. 24. 1898.

ANNOTATED BIBLIOGRAPHY

- HAWORTH**, Erasmus, and **BENNETT**, John. History of field-work in Kansas Topeka, 1908. (In Univ. Geol. Surv. Kansas. v. 9, ch. 2, p. 42-56)
See also KANSAS GEOL. SURV. (1864)
- HAY**, Oliver Perry. Bibliography and catalogue of the fossil Vertebrata of North America. Wash. Gov't print. office, 1902. 868 p. (In U. S. Geol. Sur. Bull. no. 179)
"The purpose . . . is to present a list of all the species of fossil vertebrate which have been described, up to the end of the year 1900, from all that part of the continent of North America, lying north of Mexico, and to furnish a guide to the literature relating to all those extinct forms of organized beings . . ." Preface.
Bibliography, p. 13-251; Catalogue, p. 252-794; Alphabetic index of systematic names, p. 797-868.
- HAY**, Robert. A bibliography of Kansas geology, with some annotations. Topeka 1896. (In Kansas Acad. Sc. Trans. for 1893-94. v. 14, p. 261-78)
A classified list.
See also Kansas Geol. Surv. (1864)
- HAY**, Robert, and **THOMPSON**, A. H. Historical sketch of geological work in the state of Kansas. Topeka, 1887. (In Kansas Acad. Sc. Trans. for 1885-86. v. 10, p. 45-52)
See also Kansas Geol. Surv. (1864)
- HAYDEN**, F[erdinand] V[andeveer]. United States government surveys. (In Amer. J. Sc. ser. 2, v. 34, p. 98-101. July, 1862)
Brief notices of the Reports of 6 expeditions, the publication of which was either interrupted or entirely given up. See (1) Rodgers & Ringgold Exped. (1853); (2) Northwest Boundary Surv. (1857); (3) Macomb Exped. (1859); (4) Reynolds' Exped. (1859); (5) Warren's Explor. Nebraska & Dacotah (1856); & (6) Simpson's Utah Exped. (1858)
- HAYES**, C[harles] W[illard]. . . . The state geological surveys of the United States; compiled under the direction of C. W. Hayes. Wash. 1911. 177 p. (In U. S. Geol. Surv. Bull. no. 465)
Accounts of the present organization. Includes brief historical notes of the early surveys of the respective states. Arranged alphabetically by states. See also MERRILL, G. P., (2), for histories of surveys to 1885.
- HEMENWAY**, Ansel F. Botanists of the Oregon country. Sept. 1904. (In Oregon Hist. Soc. Quart. v. 5, no. 3, p. 207-14)
Chronologic record of the leading students and collectors from the earliest days of exploration.
- HENDERSON**, Junius. The Mollusca of Colorado: part 1-2. Boulder, Colo., Feb. 1907. (In Univ. Colo. Studies. v. 4, no. 2 & 3, p. 77-96, 167-85)
Partial bibliography of 68 entries on p. 81-4.
- HENSHAW**, Samuel. Bibliography of the more important contributions to American economic entomology. Washington, 1889-1905. 8 parts. 454 p.
Pt. 1-3, 1889, 454 p. Writings of B. D. Walsh & C. V. Riley.

Pt. 4-5, 1895-96, 167 + 179 p. The more important writings of government and state entomologists, and of other contributors to the literature of American economic entomology.

Pt. 6-8, 1898-1905, (compiled by Nathan BANKS). Writings between 1888-1905.

Pt. 1-3, p. 1-49, Walsh; p. 51-95, Walsh & Riley; p. 97-371, Riley; p. 371-454, Index.

Pt. 4, A-K; Pt. 5, L-Z. Arranged alphabetically by names of author. Comprehensive list.

HERRICK, Edward Claudius. Historical sketch of the Connecticut Academy of Arts and Sciences. Boston, 1840. (In Amer. Quart. Register. v. 13, p. 23-8)
See also CONN. ACAD. A. & SC. (1799)

HERRICK, Francis Hobart. Audubon the naturalist: a history of his life and time. N. Y., Appleton & Co., 1917. 2 v. illus. pl. port. facsim.

An excellent biography, comprehensive in scope, and containing copious notes concerning the contemporaries, and the times.

Bibliography, v. 2, p. 401-56.

HIGLEY, William Kerr. . . . The Chicago Academy of Sciences: historical sketch of the Academy. Chicago, 1902. 52 p. illus. pl. port. (Chic. Acad. Sc. Special Pub. no. 1)

See also CHICAGO ACAD. SC. (1856)

HILGARD, E[ugene] W[oldemar]. A historical outline of the Geological and Agricultural Survey of the State of Mississippi. (In Amer. Geol. v. 27, no. 5, p. 284-311. May, 1901)

Repr. from Mississippi Hist. Soc. Publications. v. 3, p. 207-34. 1900. (Bibliography, p. 232-34)

Bibliographical note—Official publications of Miss. Geol. Surv. p. 309-11.

See also MISSISSIPPI GEOL. SURV. (1850)

HILL, Robert T[homas]. . . . The present condition of knowledge of the geology of Texas. Wash. Gov't print. off., 1887. 95 p. (In U. S. Geol. Surv. Bull. no. 45)

Thorough historical review of the contributions to Texan geology, and an account of the various state geological surveys, and the federal exploring expeditions which have visited the state.

See also Texas Geol. Surv. (1858)

(1) **HITCHCOCK**, Charles Henry. History of geological surveys in New Hampshire. Concord, N. H., 1874. (In his Geol. of N. H. v. 1, p. 3-12)

Review of the work of Jackson, C. H. Hitchcock, and others. See also NEW HAMPSHIRE GEOL. SURV. (1839)

(2) ——— The geology of New Hampshire. (In Jour. of Geol. v. 4, no. 1, p. 44-62. Jan.-Feb. 1896)

Account of the various surveys, explorations, etc. in New Hampshire. See also NEW HAMPSHIRE GEOL. SURV. (1839)

(3) ——— The geological map of the United States. (In Amer. Inst. Mining Eng. Trans. v. 15, p. 465-88. 1887)

General historical discussion of the various geological maps of the U. S., from Maclure's in 1809.

- (4) ——— History of opinions respecting the age and elevation of the White Mountains. Concord, N. H., 1877. (In his *Geol. of N. H.* v. 2, p. 184-98)
 - (1) HITCHCOCK, Edward. First anniversary address before the Association of American Geologists at their second annual meeting in Philadelphia, April 8, 1841. (In *Amer. J. Sc.* v. 41, no. 2, p. 232-75. Oct. 1841)
Repr. as separate. New Haven, B. L. Hamlen, 1841. 46 p.
"Sketches the most important points in American geology . . . and an account of what has already been done." (Intro.)
See also *AMER. ASSOC. GEOL. & NAT.* (1840)
 - (2) ——— History of the Survey in Massachusetts. Northampton, 1841. (In his *Final Rept. Geol. Mass.* v. 1, pref. p. 5-7)
See also *MASSACHUSETTS GEOL. SURV.* (1830)
 - (3) ——— Ichnology of New England: a report on the sandstone of the Connecticut Valley, especially its fossil footmarks, made to the Commonwealth of Massachusetts. Bost. William White, 1858. 12 + 220 p. 60 pl. 4°.
Bibliography, chronologically arranged, of papers from 1836-1858, pref. p. 9-12. Suppl. Bost. 1865.
 - (4) ——— Address delivered at the inauguration of the State Geological Hall, Albany, N. Y., August 27, 1856. Albany, N. Y., Regents of the Univ., 1857. (In *N. Y. State Mus.* 10th Ann. Rept. for 1856. p. 20-6)
Review of the early days of state geological surveys and the subsequent formation in 1840 of the *Assoc. Amer. Geol. & Nat.* (1840), q.v., and the *Amer. Assoc. Adv. Sc.* (1848), q.v.
- HOLLIDAY, John H[ampden]. An Indiana village: New Harmony. Indianapolis, 1914. (In *Indiana Hist. Soc.* Pub. v. 5, no. 4, p. 201-29)
Story of a town which was the seat of research and science during the early 19th century, under the leadership of William Maclure, Thomas Say and other members of the Philadelphia Academy of Natural Sciences during the decade 1820-1830.
- (1) HOLMES, J[oseph] A[ustin]. Historical notes concerning the North Carolina Geological Surveys. (In *Elisha Mitchell Sc. Soc. Jour.* v. 6, pt. 1, p. 5-18. 1889)
Brief review of the rise and progress of the early surveys under Olmsted, Mitchell and Kerr. See also *NORTH CAROLINA GEOL. SURV.* (1823)
 - (2) ——— Mineralogical, geological and agricultural surveys of South Carolina. (In *Elisha Mitchell Sc. Soc. Jour.* v. 7, pt. 2, p. 89-117. 1891)
Excellent historical sketch of the various surveys prior to 1865, with brief biographical sketches of the geological surveyors. See also *SOUTH CAROLINA GEOL. SURV.* (1824)
- HOOKE, William Jackson. On the botany of America. (In *Edinburgh Jour. Sc.* v. 2, no. 1, p. 108-29. Jan. 1825)

Repr. in Amer. J. Sc. v. 9, p. 263-84. June, 1825. Also in *Froriep's Notizen*. v. 10, p. 97-104, 113-20, 1825.

Concise account of the progress of botany in the U. S. up to that time.

- (1) HOPKINS, Thomas C. Contents of the published volumes of Reports of the Indiana Geological Survey, the Department of Geology and Natural History, and the Department of Geology and Natural Resources. Indianapolis, 1904. (In Indiana. Dept. Geol. & Nat. Resources. 28th Ann. Rept. for 1903. p. 487-95)

See also INDIANA GEOL. SURV. (1837)

- (2) ——— General index to all the publications of the Indiana Geological Survey, the Department of Geology and Natural Resources, and the Department of Geology and Natural History. Indianapolis, 1904. (In Indiana. Dept. Geol. & Nat. Resources. 28th Ann. Rept. for 1903. p. 497-553)

See also INDIANA GEOL. SURV. (1837)

- (1) HOSACK, David. A statement of facts relative to the establishment and progress of the Elgin Botanic Garden, and the subsequent disposal of the same to the state of New York. N. Y. Printed by C. S. Van Winkle, 1811. 56 p.

See ELGIN BOT. GARD. (1801)

- (2) ——— Cultivation of natural history in the University College of New York. N. Y., Oct. 1811. (In Amer. Med. & Phil. Register. v. 2, no. 2, p. 154-63)

- (3) ——— Syllabus of the course of lectures on botany delivered in Columbia College . . . N. Y., April, 1814. (In Amer. Med. & Phil. Register. v. 4, no. 4, p. 460-75)

Repr. separately, N. Y. 1814. 20 p.

HOUSE, H[omer] D[oliver]. A bibliography of the botany of New York State. Albany, Univ. State of N. Y., 1916. (In N. Y. State Mus. Bull. no. 188. p. 66-105)

Included in the State Botanist's Report for 1915.

Entries arranged chronologically under the names of the counties. Subject index.

See also Nat. Hist. Surv. N. Y. (1836)

HOVEY, Horace Carter, and CALL, Richard Ellsworth. Bibliographie chronologique et analytique de Mammoth Cave, Kentucky (Etats-Unis d'Amerique), 1815 a 1914. Sept. 1913. 49 p. (In *Spelunca*. v. 9, no. 73)

From the Bull. et Mem. de la Soc. de Speleologie. v. 9, p. 191-237.

A classified and annotated list.

HOWLAND, Henry R[aymond]. The Buffalo Society of Natural Sciences: historical sketch. Buffalo, N. Y., 1907. 25 p. port. (In Buffalo Soc. Nat. Sc. Bull. v. 8, no. 6)

See also Buffalo Soc. Nat. Sc. (1861)

HRDLIČKA, Aleš. Physical anthropology: its scope and aims; its history and present status within the United States. Phila. Wistar Inst. Anatomy & Biology, 1919. 164 p. port.

Excellent historical account, with biographical sketches of the chief contributors to the founding and developing of this science in this country.

Previously published in the *Amer. Anthropologist*. n. s. v. 16, p. 508-54. Oct.-Dec. 1914.

HUMPHREY, James Ellis. Botany and botanists in New England. (In *New England Mag.* v. 14, no. 1, p. 27-44, port. facsim. Mar. 1896)

A popular account, with portraits.

- (1) HUNT, Thomas Sterry. A historical account of the Taconic question in geology, with a discussion of the relations of the Taconian series to the older crystalline and to the Cambrian rocks. Montreal, 1883-84. (In *Royal Soc. Canada. Proc. & Trans.* v. 1, sect. 4, p. 217-70, 1883; & v. 2, sect. 4, p. 125-57, 1884)

Rd before the Society May 23, 1883 & May 21, 1884.

- (2) ———. . . . On the history of the great Appalachian Mountain chain . . . Cambridge, Mass., 1872. (In *Amer. Assoc. Adv. Sc. Proc. for 1871*. v. 20, p. 1-59)

The Presidential Address.

I: Geognosy of the Appalachian system, p. 3-35.

II: Origin of the crystalline rocks, p. 35-59.

- (3) ———. Special report on the trap dykes and Azoic rocks of south-eastern Pennsylvania: part I: Historical Introduction. Harrisburg, 1878. (In *Second Geol. Surv. Pa. 1875. Report E.* 21 + 253 p.)

Ch. 2-5, p. 23-253, contains: Historical sketch of American Pre-Silurian geology.

INGERSOLL, Ernst. Harvard's Botanic Garden and its botanists. (In *Century Mag.* v. 32, p. 237-48, illus. June, 1886)

Historical and descriptive account of the Garden from its earliest days. See CAMBRIDGE BOTANIC GARDEN (1805)

INGHAM, William A[rmstrong]. . . . A general index of the final summary report of the Geology of Pennsylvania . . . with an appendix containing a list of and brief guide to the publications of the Survey (1874-1901). Harrisburg, Pa., 1895. 98 + 30 p.

See also PENNSYLVANIA GEOL. SURV. (1836).

INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE, London, The Royal Society, 1901-date. v. 1-date (17 sections)

Annual issues of 17 sciences of which sections G-R are devoted to the biological sciences. Each volume has author and comprehensive subject indexes. A continuation of the ROYAL CATALOGUE OF SCIENTIFIC PAPERS, issued by the ROYAL SOCIETY OF LONDON, q.v.

The Zoological section is combined with the annual issues of the Zoological Record and issued in two forms.

- (1) IRVING, Roland Duer. Geological explorations and literature of the Penokee iron-bearing series of Michigan and Wisconsin. Wash. Gov't print. office, 1892. (In *U. S. Geol. Surv. Monograph no. 19*, ch. 1, p. 5-102)

- (2) ——— The copper-bearing rocks of Lake Superior. Wash. Gov't print. office, 1883. 16 + 464 p. illus. pl. (In U. S. Geol. Surv. Monographs. v. 5)
Earlier writers; former views as to the origin of the conglomerates, etc.; and literature, p. 4-23. Bibliography chronologically arranged, p. 14-23.
- (1) JACKSON, Benjamin Daydon. Guide to the literature of botany: being a classified selection of botanical works, including nearly 6,000 titles not given in Pritzel's "Thesaurus." London, Pub. for the Index Soc., by Longmans, Green, 1881. 40 + 626 p.
U. S., local floras, p. 354-67.
U. S. botanical gardens, p. 448-49
- (2) ——— comp. Index Kewensis: an enumeration of the genera and species of flowering plants from the time of Linnaeus to the year 1885 inclusive together with their authors' names, the works in which they were first published, their native countries and their synonyms; compiled at the expense of the late Charles Darwin under the direction of Joseph D. Hooker, by . . . Oxford, Clarendon Press, 1893-95. 4 v. 4°.
Has also Latin title-page. Supplements issued in five year periods.
- JACKSON, Charles Thomas. History of the survey of New Hampshire . . . Concord, N. H., 1844. (In his Final Rept. Geol. Surv. N. H. p. 26-8)
See also NEW HAMPSHIRE GEOL. SURV. (1839).
- JAMES, Davis L. Notice of the floras of Cincinnati, published from 1815 to 1879, with some additions and corrections to the catalog of Joseph F. James. (In Cincinnati Soc. Nat. Hist. Jour. v. 3, no. 4, p. 239-44. Jan. 1881)
- JARVIS, Samuel Farmar. An address to the citizens of Hartford, on the birthday of Linnaeus: May 24, 1836, in behalf of the objects of the Natural History Society . . . (In Nat. Hist. Soc. Hartford. Trans. v. 1, no. 1, p. 1-64. 1836)
Also delivered before Cuvierian Soc., Wesleyan Univ., July, 1836. Comparative study of the state of natural history in Europe and the United States; with a plea for the formation of a botanic garden, museum, etc., in Hartford. See Nat. Hist. Soc. Hartford, (1835)
- JEPSON, Willis L[inn]. Early scientific expeditions to California. Berkeley, Cal., Sept. 1893 & Nov. 1899. (In Erythea. v. 1, no. 9, p. 185-90; & v. 7, no. 11, p. 129-34)
Historical résumé.
- JEWETT, C[harles] C[offin]. . . . Report on the public libraries of the United States of America, January 1, 1850 . . . Washington, 1850. 207 p. (In Smith. Inst. Ann. Rept. for 1849. appx.)
Also pub. under title: "Notice of Public Libraries in the United States of America . . ."
Also to be found in government documents, Serials no. 564 & 582.
Contains many notes and statistics concerning the natural history collections, etc., of the various societies, museums, and libraries. Especially interesting for the less well-known institutions.
- JOHN CRERAR LIBRARY, Chicago, Ill. A list of bibliographies of special subjects . . . July, 1902. Chicago, 1902. 504 p. 4°.
Bibliography of natural history, p. 183-288.

- JOHNSON, Grace Pettis. . . . Historical sketch: Museum of Natural History; 1859-1909. Springfield, Mass., City Library Assoc., 1910. 58 p. illus. pl. port.
See Springfield Mus. Nat. Hist. (1859)
- JOHNSTON, John. The early history of the Museum. Middletown, Conn., 1877.
(In Wesleyan Univ. Museum. 5 & 6th Repts. of Curators. appx. A, p. 15-7)
Written July, 1868. See also Cuvierian Soc. Wesleyan Univ. (1836).
- JONES, Olive M[ary]. . . . Bibliography of Colorado geology and mining with subject index from the earliest explorations to 1912. Denver, Colo., 1914. 493 p. (In Colorado State Geol. Surv. Bull. no. 7)
Bibliography, p. [15]-331; Index, p. [333]-457; Lists, p. [458]-93. Bibliography arranged alphabetically by authors.
- (1) JORDAN, David Starr, ed. . . . Leading American men of science . . . ed. by D. S. Jordan. N. Y. Holt & Co., 1910. 7 + 471 p. 17 port.
Excellent biographical sketches, including among others Wilson, Audubon, Silliman, Agassiz, O. C. Marsh, Cope, Wyman, Dana, Gray, Baird and Goode.
- (2) ——— Ichthyology (History of). N. Y., 1919. (In Encyclopaedia Americana. v. 14, p. 652)
Brief sketch.
- (3) ——— . . . The history of ichthyology . . . Easton, Pa., 1902. (In Amer. Assoc. Adv. Sc. Proc. for June-July, 1902. v. 51, p. 427-56)
American ichthyology, p. 452-56.
Repr. in Science, n. s., v. 16, p. 241-58. Aug. 15, 1902. American ichthyology, p. 256-58.
- (4) ——— The genera of fishes, from Linnaeus to Cuvier, 1758-1833, seventy-five years, with the accepted types of each; a contribution to the stability of scientific nomenclature. Stanford Univ., Cal., 1917. 161 p. (In Leland Stanford Jr. Univ. Pub. Univ. Ser.)
The first of a series intended to cover the whole field up to the year 1920. See the following entries. Each part contains a separate index.
- (5) ——— The genera of fishes: Part II, from Agassiz to Bleeker, 1833-1858, twenty-six years, with the accepted type of each: a contribution to the stability of scientific nomenclature. Stanford Univ., Cal., July, 1919. 8 + p. 163-284 + 13 p. (In Leland Stanford Jr. Univ. Pub. Univ. Ser.)
- (6) ——— The genera of fishes: Part III, from Guenther to Gill, 1859-1880, twenty-two years, with the accepted type of each: a contribution to the stability of scientific nomenclature. Stanford Univ., Cal., Oct. 25, 1919. p. 285-410 + 15 p. (In Leland Stanford Jr. Univ. Pub. Univ. Ser.)
Part IV, from 1881-1920, pub. 1920, p. 411-576 + 18 p.
- (7) ——— Previous publications on the fishes of Ohio. Columbus, 1882. (In Geol. Surv. Ohio. v. 4: Zool. & Bot. p. 735-43)
Brief historical review.

- (8) ——— The history of ichthyology. N. Y. Holt, 1905. (In his Guide to the study of fishes. v. 1, ch. 22, p. 387-428, port.)

History of fishes in North America, including fossil fishes, p. 418-22, 426-27. Includes a discussion of the contributions of Gill, Cope, and others, amongst the Americans.

- JOSEPHSON, Aksel G[ustav] S[alomon]. . . . A list of books on the history of science . . . January, 1911. Chicago, John Crerar Library, 1911. 10 + 297 p.

Suppl. for Dec. 1916. pub. Chicago, 1917. 139 p.

Books to be found in the John Crerar Library, Chicago. Natural history on p. 174-210; & p. 71-83 (of suppl.) Does not include very many references to American natural history.

- KELBY, Robert Hendre. The New York Historical Society: 1804-1904. N. Y. Printed for the Society, 1905. 160 p.

Bibliography, p. 130-60. See also N. Y. HIST. SOC. (1804).

- KELLERMAN, W[illiam] A[shbrook]. Bibliography of Ohio botany. Columbus, Ohio, April, 1893. (In Ohio Agric. Exper. Station. Bull. Tech. Ser. v. 1, no. 3, art. 15, p. 180-201)

Arranged chronologically. Additions (In Ohio Acad. Sc. 4th Ann. Rept. Columbus, 1896. p. 5-18)

- KELLERMAN, W[illiam] A[shbrook], and WERNER, W[illiam] C. [History and] bibliography of Ohio botany. Columbus, 1893. (In Geol. Surv. Ohio. v. 7, pt. 2, p. 56-79)

- KELLY, Howard Atwood. Some American medical botanists commemorated in our botanical nomenclature . . . Troy, N. Y. Southworth Co., 1914. 215 p. pl. port. map, facsim.

p. 11-9 contains a brief sketch of the history of American botany. An attractive volume of biographies of the pioneers of American botany, with portraits. Read before Med. Hist. Soc. of Chicago in 1910; and before Univ. Nebraska, Oct. 16, 1913.

- KELLY, Howard A[twood], and BURRAGE, Walter L[incoln]. American Medical biographies. Baltimore, Norman Remington Co., 1920. 19 + 1320 p. 4°.

Contains 1948 biographical sketches of the leading American medical men, with especial emphasis on workers in natural history. pref. p. 11-9 contains a bibliography of works consulted. Arranged alphabetically by biographee, with names of biographers appended.

This is a revised and enlarged edition of a previous work (with a few biographies deleted) entitled:

- KELLY, H. A. A cyclopaedia of American medical biographies, comprising the lives of eminent deceased physicians and surgeons from 1610 to 1910 . . . Phila. & London, Saunders Co., 1912. 2 v.

v. 1, 85 + 424 p.; v. 2, 7 + 545 p.

Biographies arranged alphabetically by name of biographee. Volume one contains brief histories of some of the medical sciences, in the U. S.

KEMP, J[ames] F[urman]. A review of work hitherto done on the geology of the Adirondacks. N. Y., Nov. 1892. (In N. Y. Acad. Sc. Trans. v. 12, p. 19-24)

Repr. in Columbia College. Contrib. from Geol. Dept. v. 1, no. 7, 1892.

KENDALL, William Converse. An annotated catalogue of the fishes of Maine. Portland, Me., 1914. 197 p. (In Portland Soc. Nat. Hist. Proc. v. 3, pt. 1)

Complete annotated and chronologic bibliography and records, p. 101-97.

KERR, W[ashington] C[aruthers]. Historical sketch of the geological surveys of North Carolina. Raleigh, N. C., 1875. (In N. C. Geol. Surv. Rept. v. 1, pref. p. 7-18)

See also North Carolina Geol. Surv. (1823)

(1) KEYES, Charles Rollin. Bibliography of Iowa geology. Des Moines, 1893. (In Iowa Geol. Surv. Ann. Rept. for 1892. p. 209-472)

Dictionary alphabet of authors, subjects and titles. See also IOWA GEOL. SUBV. (1855)

(2) ———. . . . Annotated bibliography of Iowa geology and mining. Des Moines, 1913. 908 p. (In Iowa Geol. Surv. Rept. v. 22)

For contents, see IOWA GEOL. SUBV. (1855), Bibliography: 1913.

Revised and extended bibliography, with chapters on history of geology and mining in the state.

KINDLE, Edward M[artin]. Bibliography of Indiana palaeontology. Indianapolis, 1897. (In Indiana. Dept. Geol. & Nat. Resources. 22d Ann. Rept. p. 489-514)

Alphabetically by author. See also INDIANA GEOL. SUBV. (1837).

KINGSLEY, J[ohn] S[terling]. The Philadelphia Academy. (In Pop. Sc. Mthly. v. 20, p. 531-38. Feb. 1882)

Account of the origin and progress of the ACAD. NAT. SC. PHILA. (1812), q.v.

KINGSLEY, William L., ed. Yale College: a sketch of its history . . . N. Y. Holt, 1879. 2 v. folio.

Contains historical sketches of the Yale Mineralogical Cabinet (1802), q.v., the Conn. Acad. A. & Sc. (1799); and biographies of the leading scientific workers and teachers of Yale.

KLEM, Mary J. The history of science in St. Louis. (In Acad. Sc. St. Louis. Trans. v. 23, no. 2, p. 79-127. Dec. 29, 1914)

Comprehensive and thorough review of the various scientific activities in St. Louis from the earliest times with a good account of the part played by the ACAD. SC. ST. LOUIS (1856), q.v.

KLOTZ, Otto. The history of the forty-ninth parallel survey west of the Rocky Mountains. May, 1917. (In Geogr. Rev. v. 3, p. 382-87, illus.)

Story of the accidental discovery of the MS of the survey, which had been regarded as irrevocably lost. See NORTHWESTERN BOUNDARY SURVEY (1857)

KNIGHT, Ora Willis. The Birds of Maine. Bangor, Me., 1908. 693 p.

Bibliography, chronologically arranged, p. 663-71.

KNOWLTON, Frank Hall. . . . A catalogue of the Cretaceous and Tertiary plants of North America. Wash. Gov't print. office, 1898. 247 p. (In U. S. Geol. Surv. Bull. no. 152)

Bibliography, p. 13-23; Catalogue, p. 24-247.

Cont. in A Catalogue of the Mesozoic and Cenozoic plants of North America. Wash. 1919. (In U. S. Geol. Surv. Bull. no. 696)

Bibliography, p. 13-44.

KOHL, J[ohann] G[eorg]. History of the discovery and exploration on the coasts of the United States. Wash. 1885. (In U. S. Coast & Geodetic Surv. Rept. for 1884. appx. 19, p. 495-617, maps)

Résumé of the explorations along the Atlantic and Pacific coasts from the earliest times to 1854. The U. S. Government explorations are dealt with on p. 610-16.

KRAUS, Edward H. The future of mineralogy in America. (In Amer. Mineralogist. v. 6, no. 2, p. 23-34. Feb. 1921)

Takes up the history of mineralogy in the United States by periods: 1785-1850; 1850-1900; 1900-1920.

Address before the Mineralogical Society of America, Dec. 28, 1920.

Also repr. in Science. n. s. v. 53, p. 219-26. Mar. 11, 1921.

LANE, Alfred C[hurch]. Historical review of the geology of Michigan. Lansing, 1904. (In Michigan Acad. Sc. 5th Ann. Rept. p. 184-95)

See also MICHIGAN GEOL. SURV. (1837)

LANEY, Francis Baker, and WOOD, Katherine Hill. . . . Bibliography of North Carolina geology, mineralogy, and geography, with a list of maps. Raleigh, E. M. Uzzell & Co., 1909. 3 + 428 p. (In North Carolina Geol. & Econ. Surv. Bull. no. 18)

Pt. 1 Bibliography of Geology, etc. p. 1-267.

Contains 1935 entries, alphabetically by author, with a sub-arrangement alphabetically by title.

2 List of maps of N. C. p. [269-362]

Contains 784 entries.

Index: p. [363]-428.

See also N. C. Geol. Surv. (1823)

LANGDON, Frank W. Bibliography of the Cincinnati fauna. (In Cincinnati Soc. Nat. Hist. Jour. v. 6, no. 1, p. 5-39. Apr. 1883)

Classified by subject.

LEIGHTON, Henry. One hundred years of New York State geologic maps: 1809-1909. Albany, Univ. State N. Y., Aug. 15, 1909. (In N. Y. State Mus. Bull. no. 133, p. 115-55)

A historical sketch and chronological record of 329 maps which have contributed to the knowledge of the geology and palaeontology of the state. History, p. 115-23; Chronologic list, p. 124-49.

See also Nat. Hist. Surv. N. Y. (1836)

LEONARD, W[illiam] E[dwin]. Some early Philadelphia botanists: Schweinitz, Nuttall, Rafinesque and Darlington. (In Minn. Acad. Nat. Sc. Bull. v. 13, no. 1, p. 29-37. Dec. 1886)

- (1) LESLEY, J[ohn] P[eter]. . . . A dictionary of the fossils of Pennsylvania and neighboring states named in the reports and catalogues of the Survey; compiled for the convenience of the citizens of the state, by J. P. Lesley, state geologist; 3000 figures mostly facsimile copies of those published by H. D. Rogers, Hall, Conrad, Vanuxem, Emmons, Logan, Dawson, Billings, Hitchcock, Newberry, Meek, Collett, Worthen, Rominger, D. D. Owen, Cox, Lyon, Safford, Fontaine, Lesquereux, Wolcott, Leidy, Cope, and others; and some new species drawn and described by G. B. Simpson. Harrisburg, Pa., 1889-90. 3 v. illus. pl. (In Second Geol. Surv. Pa. v. P 4)
 v. 1, 1889, A-M, 14 + p. 1-437 + 31 p. (Errata)
 v. 2, 1889, N-R, p. 439-914 + 10 p.
 v. 3, 1890, S-Z, p. 915-1283 + 13 p.

- (2) ———. . . . Historical sketch of geological explorations in Pennsylvania and other states . . . Harrisburg, Pa., 1876. 200 + 26 p. (In Pennsylvania. Second Geol. Surv.: 1874-'5-'6. Rept. of Progress. v. A)
 ch. 1, p. 1-28 Early observations on the geology of Pennsylvania.
 ch. 2, p. 29-52 The Geological Society of Pennsylvania and what it did to bring about the first geological survey of the state.
 ch. 3, p. 53-198 A history of the First Geological Survey of Pennsylvania.
 ch. 4, p. 198-200 Sketch of other state surveys . . .
 See also PENNSYLVANIA GEOL. SURV. (1836); & GEOL. SOC. PA. (1832)

LESQUEREUX, [Charles] Leo. A review of the Cretaceous flora of North America. Washington, 1876. (In U. S. Geol. & Geogr. Surv. Territories. 8th Ann. Rept. for 1874. p. 316-65)

LETSON, Elizabeth J[ane]. Check-list of the Mollusca of New York. Albany, May, 1905. 112 p. (In N. Y. State Mus. Bull. no. 88)
 Repr. in N. Y. State Mus. 58th Ann. Rept. for 1904. Albany, 1905. v. 4, 112 p.

LEVERETT, Frank, and TAYLOR, Frank B. The Pleistocene of Indiana and Michigan and the history of the Great Lakes. Washington, 1915. 529 p. pl. map. (In U. S. Geol. Surv. Monographs. v. 53)
 Bibliography, alphabetically by authors, p. 33-54.

LINDAU, Gustav, and SYDOW, Paul. Thesaurus litteraturae mycologicae et lichenologicae ratione habita praecipue omnium quae adhuc scripta sunt de mycologia applicata quem congegesserunt . . . Lipsiis, Freatres Borntraeger, 1908-13. 3 v.
 v. 1, A-L. 1908. 7 + 903 p.
 v. 2, M-Z. 1909. 808 p.
 v. 3, Suppl. 1907-10. 1913.
 Arranged alphabetically by author.

LINTNER, Joseph Albert. . . . Some evidences of progress in American entomology. (In Canadian Ent. v. 10, p. 171-76. 1878)
 A review of the achievements during the forty year period: 1838-1878.

- LOOMIS, Elias. The Connecticut Academy of Arts and Sciences. (In Kingsley, W. L., ed. *History of Yale College*. 1879. v. 1, p. 329-37).
History of the formation and subsequent progress of the Conn. Acad. A. & Sc. (1799), q.v.
- LOOMIS, Leverett M[ills]. An historical sketch of South Carolinian ornithology. N. Y., L. S. Foster, 1891. 7 p.
Rd. before Linnaean Soc. of N. Y., Feb. 6, 1891, and pub. by author, Feb. 28, 1891. A review of the principal publications dealing with the subject.
- LOVERING, Joseph. Boston and science. Boston, 1881. (In Winsor, Justin, ed. *Memorial History of Boston: 1630-1880*. v. 4, ch. 9, p. 489-526)
Biographical sketches of the chief natural history workers in Boston and vicinity, p. 517-26.
- LUCAS, Frederic A[ugustus]. Linnaeus and American natural history. N. Y., Jan. 1908. (In N. Y. Acad. Sc. *Annals*. v. 18, no. 1, p. 52-7)
- LULL, Richard Swann. On the development of vertebrate palaeontology. (In *Amer. J. Sc.* ser. 4, v. 46, art. 6, p. 193-221. July, 1918)
Repr. in (A) *CENTURY of science in America*. New Haven, 1918. ch. 6, p. 217-47. (See *CENTURY* above).
Analysis of the contributions made by Leidy, Cope and O. C. Marsh in the United States; and also those made by Europeans.
- LUTRELL, Estelle. . . . Bibliography of Arizona mining, metallurgy and geology, compiled under the direction of . . . Tucson, Arizona, 1915-16. 49 p. (In *Univ. Arizona. Bur. Mines. Bull.* no. 23)
Dictionary alphabet of subjects, authors, etc.
- McATEE, W[aldo] L[ee]. A sketch of the natural history of the District of Columbia, together with an indexed edition of the United States Geological Survey's 1917 map of Washington and vicinity. Wash. May, 1918. 142 p. fold. map. (In *Biol. Soc. Wash. Bull.* no. 1)
Historical sketches with bibliographies of the botany and zoology of the District of Columbia from the earliest times.
- McDANIEL, B. F. Geology and mineralogy in Essex County, Massachusetts. (In *Essex Inst. Bull.* v. 16, p. 133-40. July-Dec. 1884)
An historical account.
- MARCOU, John Belknap. . . . Bibliography of publications relating to the collection of fossil invertebrates in the United States National Museum, including complete lists of the writings of Fielding B. Meek, Charles A. White, and Charles D. Walcott . . . Wash. Smithsonian Institution, 1885. 333 p. (In *U. S. Nat. Mus. Bull.* no. 30)
One of the series of "Bibliographies of American naturalists." Includes also the palaeontological writings of the following naturalists: Bailey, Conrad, Dana, Hall, Hyatt, Marcou, Newberry, D. D. Owen, Schiel, Shumard, Whitfield, Nicollet, Prout.
- (1) MARCOU, Jules. The "Taconic system" and its position in stratigraphic geology. Bost. 1884-85. (In *Amer. Acad. A. & Sc. Proc.* v. 20 (n. s. v. 12), p. 174-256)

Treats chronologically the various views on the "Taconic" question, p. 174-221. (1837-1881)

- (2) ——— Growth of knowledge concerning the Texas Cretaceous. (In *Amer. Geol.* v. 14, p. 98-105. Aug. 1894)

Concise historical account.

MARCOU, Jules, and MARCOU, John Belknap. . . . *Mapoteca geologica Americana: a catalogue of geological maps of America (North and South) 1752-1881, in geographic and chronologic order.* Wash. Gov't print. off., 1884. 184 p. (In *U. S. Geol. Surv. Bull.* no. 7)

Contains 924 entries.

Index of authors & places, p. 173-84.

2d supplement in *Amer. Geol.* v. 11, p. 95-9. 1893.

MARGERIE, Emm[manuel] de. . . . *Catalogue des bibliographies geologiques redige, avec le concours des membres de la Commission bibliographique du Congres.* Paris, Gauthier-Villars et fils, 1896. 20 + 733 p.

A comprehensive classified catalogue, *Parte generale*, p. 1-106; *partie regionale*, p. 107-651.

North America, p. 596-651 (classified—bibliography of bibliography; bibliography of biography, etc.)

MARSCHALL, August de. *Nomenclator zoologicus, continens nomina systematica generum animalium tam viventium quam fossilium, secundum ordinem alphabeticum disposita sub auspicio et sumptibus C. R. Societatis zoologico-botanicae conscriptus a Comite Augusto de Marschall.* Vindobonae, 1873. 4 + 482 p.

Contains 19,966 entries. See also SCUDDER (6), below, who states that it is inaccurate and unreliable.

MARSH, Othniel C[harles]. *A catalogue of official reports upon geological surveys of the United States and the British provinces.* (In *Amer. J. Sc.* ser. 2, v. 43, p. 116-21, 399-404. Jan. & May, 1867)

First list of its kind. Compiled from volumes in the Library of Yale College. Material arranged geographically by states, with a chronological sub-arrangement.

MARSTERS, Vernon F[reeman], and KINDLE, E[dward] M[artin]. *Geological literature of Indiana (Stratigraphic and economic).* Brookville, Ind., 1894. (In *Indiana Acad. Sc. Proc.* 1893. p. 156-91)

Dictionary alphabet of authors, subjects, etc.

MARTIN, D[aniel] S[trobel]. *The first half-century of the American Association.* (In *Popular Sc. Monthly.* v. 53, p. 822-35. Oct. 1898)

Interesting historical sketch of the formation and early years of the Association.

See also *Amer. Assoc. Adv. Sc.* (1848).

MARTIN, George Curtis. *The geology of Garret County: historical review and bibliography.* Baltimore, 1902. (In *Maryland Geol. Surv. Garret Co.*, p. 55-81)

History, p. 55-66; Bibliography, p. 67-81, (arranged chronologically)

- MARTIN, Lawrence. Chronological list of federal and state survey reports, with a few other early papers on the geology and physical geography of Wisconsin. Madison, 1916. (In Wisconsin Geol. & Nat. Hist. Surv. Bull. no. 36. Educ. ser. no. 4. p. 477-92)
See also WISCONSIN GEOL. SURV. (1653)
- (1) MATHEWS, Edward B[ennett]. Bibliography and cartography of Maryland including publications relating to the physiography, geology and mineral resources. Baltimore, 1897. (In Maryland Geol. Surv. Rept. for 1897. v. 1, pt. 4, p. 229-401)
Annotated, and arranged chronologically. Bibliography, geology, etc., p. 231-331. Bibliography maps, etc., p. 332-401.
See also Maryland Geol. Surv. (1833)
- (2) ——— The maps and map-makers of Maryland. Baltimore, 1898. (In Maryland Geol. Surv. for 1898. v. 2, p. 337-488, 6 maps)
Chronologic and classified treatment of material.
See also Maryland Geol. Surv. (1833)
- MAZYCK, William Gaillard. Catalog of Mollusca of South Carolina. Charleston, S. C., 1913. 16 + 39 p. (In Charleston Mus. Contr. no. II)
History of S. C. conchology, pref. p. 7-9. Bibliography, p. 33-6.
- MEADS, O[rlando]. Annual address . . . on the leading facts in the history of the Society . . . Albany, N. Y., 1872. (In Albany Inst. Trans. v. 7, p. 1-34)
Presidential address delivered May 25, 1871. See also ALBANY INST. (1824), which succeeded the ALBANY LYC. NAT. HIST. (1823), q.v., which in turn succeeded the SOC. PROM. USEFUL ARTS (1804) & SOC. PROM. AGRIC. ARTS & MANUF. (1791), q.v.
- (1) MERRILL, Frederick J[ames] H[amilton]. The Natural History Survey of New York and the origin of the State Museum. Albany, Univ. State N. Y., Nov. 1898. (In N. Y. State Mus. Bull. no. 19, p. 240-45)
See also NAT. HIST. SURV. N. Y. (1836) & N. Y. STATE CABINET NATURAL HISTORY (1843)
- (2) ——— History of the New York geologic surveys. Albany, Univ. State N. Y., Nov. 1902. (In N. Y. State Mus. Bull. no. 56, p. 5-10)
See also NAT. HIST. SURV. N. Y. (1836)
- (3) ——— Natural history museums of the United States and Canada . . . Albany, Univ. State N. Y., 1903. 233 p. (In N. Y. State Mus. Bull. no. 62. Misc. no. 1)
Arranged alphabetically by states, with a sub-arrangement of institutions, in alphabetical order under each state. Contains brief notes and descriptions of the collections.
- (1) MERRILL, George P[erkins]. Contributions to the history of American geology. Washington, 1906. (In U. S. Nat. Mus. Ann. Rept. for 1904. p. 189-733, illus. pl. port. maps, charts, tab.-37 pl. 141 fig.)
The standard and classic history of American geology, mineralogy and paleontology, "whose modest title fails even to suggest that this work not only

furnishes the most useful chronologic record of the progress of the science on the American continent, but is in fact a very thesaurus of incidents touching the personal side of geology," George Otis SMITH. (In *American Journal of Science*. ser. 4, v. 46, p. 173. July, 1918). Repr. in (A) *Century of Science in America*. New Haven, 1918. p. 195.

References to the critical discussions by MERRILL on the contents of the various Reports, Papers, etc., contained throughout this work, have been cited.

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- (2) ———, ed. & comp. . . . Contributions to a history of American state geological and natural history surveys; edited and compiled by George P. Merrill. Washington, Gov't print. office, 1920. 18 + 549 p. 37 pl. (78 port.) (In U. S. Nat. Mus. Bull. no. 109)

Historical accounts, varying in length, of the 36 states which have had state geological surveys prior to 1885. The accounts were in a number of cases written by the state geologists of that date, and were ed. by Merrill for this work.

Contains reprints of the original acts authorizing the various surveys, discussion of the expenses, personnel, publications and their contents, etc.

Appx. 1, p. 537-38, Summary of principal items relating to state surveys, including tabular statement giving dates, names of geologists, and expenses of all state surveys existing prior to 1900.

Contains nearly 80 portraits of the various state geologists.

MICHIGAN GEOLOGICAL AND BIOLOGICAL SURVEY. Reports: 1838-1912. Lansing, [1912.] 13 p.

Houghton & Winchell Reports indexed, p. 3-4. See MICHIGAN GEOL. SURV. (1837)

Later ed.,: Catalog and Table of Contents of the Publications of the . . . 1838-1917. Lansing, 1917. 30 p.

MILLER, Benjamin Le Roy. Development of knowledge concerning the physical features of Prince George's County, with bibliography. Baltimore, 1911. (In Maryland Geol. Surv. Prince George's Co. p. 24-68)

History, p. 24-33; Bibliography, chronologically arranged, p. 33-68.

- (1) MILLER, S[amuel] A[lmond]. Brief mention of some of the men who aided in developing the science of geology in America, but who are known no longer except by their works. (In Cincinnati Soc. Nat. Hist. Jour. v. 5, p. 101-15. 1882)
- (2) ——— North American Mesozoic and Caenozoic geology and palaeontology. (In Cincinnati Soc. Nat. Hist. Jour. v. 2, p. 140-61, 223-44. Oct. 1879-Jan. 1880)
 Cont. in v. 3, p. 9-32, 79-118, 165-202, 245-88. Apr., July & Oct. 1880 & Jan. 1881.
 Cont. in v. 4, p. 3-46, 93-144, 183-234. Apr., July & Oct. 1881.
 Review of the literature up to 1881.
- MILLSPAUGH, C[hables] F[rederick]. Botanical field work in the state of West Virginia. Wheeling, W. Va., 1913. (In West Virginia Geol. Surv. v. 5 (A). pt. 1, p. 2-13)
 Brief historical sketch of the leading workers.
- MINOT, Charles Sedgwick. A bibliography of vertebrate embryology. Boston, 1893. (In Bost. Soc. Nat. Hist. Mem. v. 4, p. 487-614)
 Titles are grouped under subjects which are arranged alphabetically.
- MITCHILL, Samuel Latham. A discourse delivered before the New York Historical Society, at their anniversary meeting December 6, 1813, embracing a concise and comprehensive account of the writings which illustrate the botanical history of North and South America. (In N. Y. Hist. Soc. Coll. v. 2, p. 149-215. 1814)
 p. 161- 65 16th century
 p. 165- 74, 17th century
 p. 174-209, 18th century
 p. 209- 15, 19th century
- MOHR, Charles [Theodore]. History of the earlier botanical explorations of Alabama. Montgomery, Ala., Oct. 1901. (In Alabama Geol. Surv. Monograph no. 5: Plant life of Alabama. p. 13-8)
 Bepr. from U. S. Nat. Herbarium. Contributions. v. 6, p. 13-8. Wash. July 31, 1901.
- MORRIS, J[ohn] G[ottlieb]. Contributions towards a history of entomology in the United States. (In Amer. J. Sc. ser. 2, v. 1, p. 17-27. Jan. 1846)
 Bd. before the Nat. Inst. Prom. Sc. (1840), q.v., on April 3, 1844.
 Sketch of the leading American entomologists of the time with a review of their work, by a contemporary leader in the field.
- MORSE, Albert P[itts]. Manual of the Orthoptera of New England, including the locusts, grasshoppers, crickets, and their allies. (In Bost. Soc. Nat. Hist. Proc. v. 35, no. 6, p. 197-556, pl. 10-29. Apr. 1920)
 History of N. E. Orthopterology, p. 208-11; Collections, p. 211-12.
- (1) MORSE, E[dward] S[yvester]. Notes on the condition of zoology, fifty years ago and of today, in connection with the growth of the Essex Institute. Salem, Mass., July-Dec. 1884. Bull. v. 16, p. 113-21)
 See also ESSEX INST. (1848), and ESSEX CO. NAT. HIST. SOC. (1833)

- (2) ——— Address on the development of "Evolution" in the United States. Salem, Mass., 1877. (In Amer. Assoc. Adv. Sc. Proc. Aug. 1876. v. 25, p. 137-76)
Continued as the Presidential Address before the Assoc. (In Amer. Assoc. Adv. Sc. Proc. Aug. 1887. v. 36, p. 1-43)
Repr. under title: "What American zoologists have done for evolution." (In Pop. Sc. Mthly. v. 10, p. 1-16, 181-98. Nov. & Dec. 1876). Continuation is in Pop. Sc. Mthly. v. 31, p. 804-13. Oct. 1887 & v. 32, p. 100-14, 492-504. Nov. 1887 & Feb. 1888.
- MORTON, Samuel George. The Academy of Natural Sciences of Philadelphia. Bost. May, 1841. (In Amer. Quart. Register. v. 13, p. 433-38)
Repr. as the "History" of the PHILA. ACAD. NAT. SC. (1812), q.v.
- MULDER BOSGOED, D[irk]. *Bibliotheca ichthyologica et piscatoria-catalogus van boeken en geschriften over de natuurlijke geschiedenis van de visschen en walvisschen, de kunstmatige vischteelt, de visscherijen, de wetgeving op de visscherijen, enz . . . bewerkt door . . . Haarlem, De Erven Loosjes, 1874. 26 + 474 p.*
Contains also French title-page, and a Preface in French: "Bibliotheca ichthyologica et piscatoria—catalogue de livres et d'écrits sur l'histoire naturelle des poissons et des cétacés, la pisci—culture, les pêches, la législation des pêches . . . rédigé par . . ."
A revision and expansion of his "Proeve eener ichthyologische bibliographie . . ." 1868-71.
Classified list. Superseded by DEAN (q.v.)
- MURRAY, David. *Museums: their history and their use, with a bibliography and list of museums in the United Kingdom.* Glasgow, James MacLehose & Sons, 1904. 3 v.
v. 2-3 Bibliography & literature of museums. A classified list arranged alphabetically by the name of the place. Not particularly strong on American material.
- (1) NATIONAL ACADEMY OF SCIENCES. *Biographical memoirs.* Washington, 1877—date. v. 1—date.
Excellent biographies of many of the leading naturalists who were members of the Academy.
For individual naturalists, see BIBLIOGRAPHY OF BIOGRAPHIES, following the GEOGRAPHICAL INDEX.
- (2) ——— A history of the first half-century of the National Academy of Sciences: 1863-1913. Wash. 1913. [13] + 399 p. 4°.
p. 1-23 deals with the founding of the Academy; p. 25-102, with the annals of the Academy; and chapter 3, contains biographical sketches of the members of the Academy at its foundation. See also Nat. Acad. Sc. (1863)
- NEWBERRY, J[ohn] S[trong]. . . . *Geology of Ohio: historical sketch.* Columbus, 1873. (In Geol. Surv. Ohio. Rept. Geology. v. 1, p. 1-15)
See also Ohio Geol. Surv. (1837)
- NEWTON, Henry. [Historical sketch of explorations in the Upper Missouri region]. Washington, 1880. (In U. S. Geogr. & Geol. Surv. Rocky Mt. Region. *Geology of the Black Hills of Dakota.* ch. 1, p. 5-21)

NICKLES, John M[ilton]. . . . Bibliography of North American geology for 1908 with subject index. Wash. Gov't print. office, 1909. 148 p. (In U. S. Geol. Surv. Bull. no. 409)

The first of a series of annual bibliographies by Mr. Nickles, in succession to those of Messrs. Weeks & Darton (see above). Bull. 444 (for 1909), 174 p.; Bull. 495 (for 1910), 179 p.; Bull. 524 (for 1911), 162 p.; Bull. 545 (for 1912), 192 p.; Bull. 584 (for 1913), 183 p.; Bull. 617 (for 1914), 167 p.; Bull. 645 (for 1915), 144 p.; Bull. 665 (for 1916), 172 p.; Bull. 684 (for 1917), 154 p.; Bull. 698 (for 1918), 148 p.

——— Geologic literature on North America. Wash. Gov't print. office, 1923. 1167 p. (In U. S. Geol. Surv. Bull. no. 746)

Part 1: Bibliography for 1785-1918

2: Index. (In Bull. 747)

Cumulation of all preceding Bull. including Darton's (q.v.)

NICKLES, John M[ilton], and BASSLER, Ray S[mith]. A synopsis of American fossil Bryozoa, including bibliography and synonymy. Washington Gov't print. off., 1900. 663 p. (In U. S. Geol. Surv. Bull. no. 173)

Bibliography, p. 125-663. Classified catalogue of genera and species, p. 161-440. List of papers arranged by authors, p. 469-561. Foregoing list classified, p. 562-663.

(1) NOLAN, Edward J[ames]. A short history of the Academy of Natural Sciences of Philadelphia. Phila., The Academy, 1909. 38 p. pl. port.

See the PHILA. ACAD. NAT. SC. (1812)

(2) ———, ed. An index to the scientific contents of the Journal and Proceedings of the Academy . . . 1817-1910; published in commemoration of the centenary of the Academy, March 21, 1912; ed. by E. J. Nolan. Phila., 1913. 1419 p.

For contents see PHILA. ACAD. NAT. SC. (1812), Bibliography: 1913.

NOURSE, J[oseph] E[verett]. American explorations in the ice zones; the expeditions of De Haven, Kane, Rodgers, Hayes, Hall, Schwatka, and De Long . . . with a brief notice of the Antarctic cruise under Lieut. Wilkes, 1840 . . . prepared chiefly from the official sources . . . Bost. Lothrop & Co., 1884. 578 p. illus. pl. maps.

See WILKES U. S. EXPLOR. EXPED. (1838); RODGERS & RINGGOLD EXPED. (1853); KANE'S ARCTIC EXPED. (1852); HALL'S ARCTIC EXPED. (1860); & HAYES'S ARCTIC EXPED. (1860).

O'DONNELL, Gretchen. . . . Bibliography of Washington geology and geography . . . Olympia, Wash., 1913. 63 p. (In Wash. Geol. Surv. Bull. no. 12)

Alphabetically by author. Bibliography, p. [9]-53. Index, p. 55-63.

A revision and enlargement of: ARNOLD, Ralph. Bibliography of the literature referring to the geology of Washington. (In Wash. Geol. Surv. Ann. Rept. 1901. v. 1, pt. 6, p. 323-38)

(1) O'HARRA, Cleophas C[isney]. A bibliography of contributions to the geology and geography of the Black Hills region. Rapid City, S. D., South Dakota

School of Mines, Dept. of Geology, Apr. 1900. (In South Dakota School of Mines. Bull. no. 4, p. 45-86)

Annotated and chronological list.

- (2) ——— A history of the early explorations and of the progress of geological investigation in the Black Hills region. Rapid City, S. D., South Dakota School of Mines, Dept. of Geology, Apr. 1900. (In South Dakota School of Mines. Bull. no. 4, p. 7-44, 1 pl. 7 maps)

- (3) ——— . . . A bibliography of the geology and mining interests of the Black Hills region. Rapid City, S. D., May, 1917. 216 + 7 p. (In South Dakota School of Mines. Dept. of Geol. Bull. no. 11)

Well annotated. Chronologically arranged material.

Some general bibliographies on palaeontology, geology and mineralogy, p. 212-15. Bibliography of biographical memoirs of naturalists who have worked in the Black Hills region, p. 215-16.

- (4) ——— The geology of Alleghany County. Baltimore, 1900. (In Maryland Geol. Surv. Alleghany Co. p. 57-163)

Historical review, p. 60-9; Bibliography, arranged chronologically, p. 69-85. (177 titles)

ORTON, Edward, Jr. Geological surveys of Ohio. (In Jour. Geol. v. 2, no. 5, p. 502-16. July-Aug. 1894)

Historical sketch of the surveys prior to 1885. See also Ohio Geol. Surv. (1837)

OSBORN, Henry Fairfield. The State Museum and state progress. (In Science. n. s. v. 18, p. 493-504. Oct. 18, 1912)

Read Oct. 15, 1912, at the opening of the N. Y. State Museum, Albany, N. Y. Contains a review of the pioneer scientific workers of the state. See also N. Y. St. Cab. Nat. Hist. (1843).

PACKARD, A[lpheus] S[pring], Jr. A century's progress in American zoology. (In Amer. Nat. v. 10, p. 591-98, Oct. 1876)

Repr. (In Kingsley, J. S. The Standard Natural History. Bost. 1885. v. 1, pref. p. 68-72)

Brief story of the various phases of zoological activity, and an enumeration of the most important workers in the respective branches.

- (1) PALMER, T[heodore] P[almer]. Personalia in ornithology. (In Auk. v. 34, p. 445-52. 1917)

On p. 449-50 are brief notes concerning the location of a number of the early American ornithologists.

- (2) ——— Index generum mammalium: a list of the genera and families of mammals . . . prepared under the direction of Dr. C. Hart Merriam . . . Washington, Gov't printing office, 1904. 984 p. (In U. S. Dept. Agric. Biol. Surv. North American Fauna. no. 23)

An excellent and comprehensive list divided into the following three parts:

Pt. 1 Introduction, p. 7-69; Alphabetical index of genera, p. 70-717.

Pt. 2. Alphabetical index of families and sub-families, p. 719-76.

Pt. 3. Index of genera arranged according to orders and families; Index. p. 777-984.

- (3) ——— Chronology and index of the more important events in American game protection: 1776–1911. Washington, Gov't printing office, 1912. 62 p. (In U. S. Dept. Agric. Biol. Surv. Bull. no. 41)
- PALTSITS, Victor Hugo. Bibliographical data. N. Y. 1904. (In Thwaites, R. G., ed. Original Journals of the Lewis & Clark Expedition. v. 1, pref. p. 61–93)
Full collation of the various editions of the Lewis & Clark Expedition (1804), q.v.
- PARIS, E[douard] G[abriel]. Index Bryologicus sive enumeratio muscorum hucusque cognitorum adjunctis synonymio distributioneque geographica locupletissimis quem conscripsit . . . Paris, 1894–98. 2 + 1380 p.
Alphabetically by species. Supplements, 1900–4.
- PEARSON, T. Gilbert. Ornithological work in North Carolina. (In Elisha Mitchell Sc. Soc. Jour. v. 24, pt. 2, p. 33–43. June 20, 1908)
Historical sketch of the principal contributors to a knowledge of N. C. birds.
- PEASE, Arthur Stanley. Notes on the botanical exploration of the White Mountains. Boston, June, 1917. (In Appalachia. v. 14, p. 157–78)
Chronologic account of the principal workers.
- PEIRCE, George J[ames]. American botany. Tucson, Ariz., April, 1911. (In Plant World. v. 14, no. 4, p. 81–7)
Brief sketch.
- PENFIELD, Samuel L[ewis]. History of the Mineralogical Department and of the development of mineralogy at Yale. N. Y., 1901. (In Penfield, S. L., & Pirsson, L. V. Contributions to mineralogy and petrography from the laboratories of the Sheffield Scientific School of Yale University. p. 3–30)
The Yale Bicentennial Publications. Bibliography p. 9–30. See YALE COLLEGE MINERALOGICAL CABINET (1802)
- PENHALLOW, D[avid] P[earce]. A review of Canadian botany from the first settlement of New France to the end of the nineteenth century, in two parts. Montreal, 1887 & 1897. (In Royal Soc. Canada. Proc. & Trans. v. 5, sect. 4, p. 45–61, 1887; & ser. 2, v. 3, sect. 4, p. 3–56, 1897)
Pt. 1—First settlements to 1800.
2—1800–1895.
Rd before the Society, May 26, 1887 & June 21, 1897.
Bibliography, pt. 2: ser. 2, v. 3, p. 27–56.
Contains much relating to contemporary American workers.
- (1) PERKINS, George Henry. List of reports on the geology of Vermont, 1845–1900. Albany, N. Y., 1902. (In Vt. Geol. Surv. Rept. State Geol. 1901–2. p. 14–21)
See VERMONT GEOL. SURV. (1844)
- (2) ——— List of works on the geology of Vermont. Montpelier, Vt., 1904. (In Vt. Geol. Surv. Rept. v. 4, p. 16–21)
See VERMONT GEOL. SURV. (1844)

- PFEIFFER, Ludovicus. Nomenclator botanicus, nominum ad finem anni 1858 publici juris factorum, classes, ordines, tribus, familias, divisiones, genera, subgenera vel sectiones designantium enumeratio alphabetico, adjectis auctoribus, temporibus, locis systematicis apud varios, notis literariis atque etymologicis et synonymis . . . Casselius, Sumptibus Theodori Fischeri, 1873-74. 2 v. 4°. v. 1, A-K, 1873-74. 4 + 1876 p. v. 2, L-Z, 1874. 1697 p.
- PIPER, Charles V[ancouver]. . . . Flora of the state of Washington. Wash., Gov't print. office, 1906. 637 p. pl. (In U. S. Nat. Herbarium. Contr. v. 11) Botanical explorers of Washington, p. 10-20. Bibliography, p. 615-18.
- PIRSSON, Louis V[alentine]. The rise of petrology as a science. (In Amer. J. Sc. ser. 4, v. 46, art. 7, p. 222-39. July, 1918)
Repr. in (A) CENTURY of science in America. New Haven, 1918. ch. 7, p. 248-67. See CENTURY above.
- POINSETT, Joel Roberts. Discourse on the objects and importance of the National Institution for the Promotion of Science, established at Washington, 1840, delivered at the first anniversary. Washington, 1841. 52 p.
Delivered Jan. 4, 1841. Natural history discussed on p. 21-33. Extracts also in its Proc. Bull. no. 1, p. 19-30. See also NAT. INST. PROM. SC. (1840).
- PORTER, Thomas Conrad. The Pennsylvania-German in the field of the natural sciences. 1896. (In Penn-German Soc. Proc. v. 6, p. 22-38, port.)
Considers the contributions of Muhlenberg, Leidy, Schweinitz, Haldeman, Wollé, Rathvon and others.
Also pub. as a separate. 15 p.
- POUND, Roscoe. Bibliography of the flora of Nebraska. Lincoln, Neb., 1894. (In Univ. Nebraska. Bot. Surv. Neb. Rept. for 1893. p. 43-8)
Repr. in (POUND, Roscoe & CLEMENTS, F. E. Phytogeography of Nebraska. Lincoln, 1900. p. 22-30)
- PRATT, Daniel J. Manual of the Albany Institute: prepared under the order of the Institute, March, 1870. (In Albany Inst. Trans. v. 6, p. 299-344)
Contains a history of the Institute, its members, charters, constitution, etc.
See also ALBANY INSTITUTE (1824)
- PRATT, Harry Sherring. The study of animals in America. Chicago, McClurg, 1916. (In his Study of common invertebrate animals. Introd. p. 5-10)
Very brief account of the history of zoology in the U. S.
- PRIME, Frederick, Jr. A catalogue of official reports upon geological surveys of the United States and territories, and of British North America. Phil. 1879. 71 p.
Repr. from (Amer. Inst. Mining Eng. Trans. v. 7, p. 455-525, 1879; v. 8, p. 466-78, 1880; v. 9, p. 621-32, 1881)
Arranged alphabetically by names of the states. Includes also the Reports of numerous exploring expeditions.
- PRITZEL, Georg August. Thesaurus literaturae botanicae omnium gentium inde a rerum botanicorum initiis ad nostra usque tempora quindecim millia operum recensens. Leipzig, Brockhaus, 1872-77. 576 p. 4°.

Pt. 1 Alphabet of biographees, with list of chief publications (books only), arranged chronologically.

2 Subject classification. (Flora of N. A. p. 469-71)

First pub. 1851. 547 p. with A Suppl. 1853. 59 p.

- (1) PROSSER, Charles S[mith]. Stratigraphic geology. (In Ohio Acad. Sc. Proc. v. 4, pt. 7. p. 340-48. 1905)

Rd before the Academy Dec. 28, 1905. Constitutes the 14th Ann. Rept. of the Acad. Historical survey of American stratigraphic geology, with especial reference to Ohio.

- (2) ——— Lower Devonian: historical review and bibliography. Baltimore, 1913. (In Maryland Geol. Surv. Lower Devonian. p. 42-66)

History, p. 42-55; Bibliography, chronologically arranged, p. 55-66.

PROVIDENCE FRANKLIN SOCIETY. Index of publications bearing upon the geology and minerology of Rhode Island, chronologically arranged. Providence, 1887. (In its Rept. Geol. Rhode Island. p. 2-57)

Annotated chronological bibliography. See also Rhode Island Geol. Surv. (1839)

PUTNAM, F[rederic] W[ard], ed. The naturalists' directory; part 2: North America and the West Indies. Salem, Mass., Oct. 1865. (In Essex Inst. Proc. v. 4, appx. 84 + 16 p.)

Another ed., Salem, 1866. 84 p.

Interesting as showing the various workers engaged in the different branches of natural history, at the close of the Civil War.

PYLE, Howard. Bartram and his garden. (In Harper's New Monthly Magazine. v. 60, p. 321-30, illus. Feb. 1880)

Historical account and description of the famous colonial garden.

RAFINESQUE, C[onstantine] S[chmaltz]. Survey of the progress and actual state of natural sciences in the United States of America, from the beginning of this century to the present time. N. Y., Dec. 1817. (In Amer. Monthly Mag. & Critical Review. v. 2, no. 2, p. 81-8)

By a leading naturalist of the day.

- (1) RATHBUN, Richard. . . . Descriptive catalogue of the collection illustrating the scientific investigation of the sea and fresh waters . . . Washington, 1883. (In U. S. Nat. Mus. Bull. no. 27. p. 511-621)

This is section "G" of the Report upon the American section of the Great International Fisheries Exhibition," held in London during 1883; ed. by G. B. Goode.

The Introduction, p. 513-41, gives a rapid survey of the American collections of aquatic life, made on the waters of the globe, during the century by private collectors, museums, scientific societies, exploring expeditions, and natural history surveys.

- (2) ——— The Columbian Institute for the Promotion of Arts and Sciences: a Washington Society of 1816-1838, which established a Museum and Botanic Garden under government patronage. Washington, Gov't printing office, Oct. 18, 1917. 3 + 87 p. (In U. S. Nat. Mus. Bull. no. 101)

Excellent study of the part played by the Institute in developing a national spirit in science.

See also *Columbian Institute Prom. Sc.* (1816).

- (3) ——— The United States National Museum: an account of the buildings occupied by the national collections. Washington, 1905. (In *U. S. Nat. Mus. Ann. Rept.* for 1903. p. 177–309, 29 pl.)

Traces the origin of the Museum and its collections from the foundation of the Smithsonian Institution (1846), q.v.

- (4) ——— . . . The National Institute: 1840–1862 . . . Washington, 1924. (In *U. S. Nat. Mus. Bull.* no. —)

A posthumous publication. See also *Nat. Inst. Prom. Sc.* (1840).

At this writing still in MS.

RATHVON, Simon Snyder. An essay on the origin of the Linnaean Society of Lancaster City and County; its objects and progress, read before the Association on its fourth anniversary, at the Athanaeum Rooms, February 24, 1866; to which are appended its charter, its list of officers, its members and its correspondents. Lancaster, 1866. 18 p.

See also *Linnaean Soc. Lancaster, Pa.* (1862)

- (1) REA, Paul Marshall. A directory of American museums. Buffalo, 1910. 360 p. (In *Buffalo Soc. Nat. Sc.* v. 10, no. 1)

Arranged alphabetically by states; with sub-arrangement alphabetically by states & cities. Gives historical notices for each institution.

- (2) ——— A contribution to early museum history in America. (In *Amer. Assoc. Mus. Proc.* v. 9, p. 53–65. 1915)

A history of the first public museum in the U. S., the Charleston (S. C.) Museum (1773), q.v. See also *Science*. n. s. v. 57, p. 677–80. June 15, 1923.

- (3) ——— History of ornithology in South Carolina. Charleston, S. C., 1910. (In *Charleston Museum. Contr.* no. 1. pref. p. 12–21)

Included as an introduction to WAYNE, A. T. *Birds of S. C.* See also *Contr.* no. 3, pref. p. 5–6. 1917.

REHDER, Alfred. . . . The Bradley Bibliography; a guide to the literature of the woody plants of the world published before the beginning of the twentieth century; compiled at the Arnold Arboretum of Harvard University, under the direction of Charles Sprague Sargent, by Alfred Rehder. Cambridge, Mass., The Arnold Arboretum, 1911–18. 5 v. 4°.

v. 1, 1911, Dendrology—general;

v. 2, 1912, Dendrology—taxonomic arrangement

v. 3, 1915, Economic products & uses of woody plants; Arboriculture

v. 4, 1914, Forestry

v. 5, 1918, Index of authors and titles; Subject index to v. 1–5.

Magnificent bibliographical achievement, the product of more than 10 years of labor.

- (1) RHEES, William Jones. The Smithsonian Institution: documents relative to its origin and history, 1835–1899. Washington, The Smithsonian Institution, 1901. 2 v. (In its *Misc. Coll.* v. 42–43)

v. 1, 1835-87; v. 2, 1887-1899.

See also SMITHSONIAN INSTITUTION (1846)

- (2) ——— . . . List of publications of the Smithsonian Institution, 1846-1903. Wash. 1903. 99 p. Pub. no. 1376.

See also SMITHSONIAN INSTITUTION (1846): Bibliography.

- (1) RICE, William North. The geology of James Dwight Dana. New Haven, 1915. (In RICE, W. N., and others. Problems of American geology. ch. 1, p. 1-42)

The Mrs. Hepsa Ely Silliman Memorial Lectures.

- (2) ——— . . . The contributions of America to geology. (In Science. n. s. v. 25, p. 161-75. Feb. 1, 1907)

Repr. in Amer. Assoc. Adv. Sc. Proc. 1906-1907. v. 56-57, p. 461-84. The vice-presidential address, Dec. 1906, before Sect. E., of the Association.

Deals with (1) Permanence of continents; (2) Theory of mountain making; (3) Glacial geology; (4) Sub-aerial denudation and the evolution of drainage systems; (5) Tertiary mammals and the doctrine of evolution.

- RICKER, P[erey] L[e Roy]. A sketch of botanical activity in the District of Columbia and vicinity. Washington, Aug. 19, 1918. (In Wash. Acad. Sc. Jour. v. 8, no. 14, p. 487-98)

Very good history of the various workers and agencies which have contributed to a knowledge of botany in the District, from the earliest days.

- (1) RIDGWAY, Robert. Nomenclature of North American birds chiefly contained in the United States National Museum. Washington, Gov't print. office, 1881. 94 p. (In U. S. Nat. Mus. Bull. no. 21. Pub. no. 422)

Additions in U. S. Nat. Mus. Proc. v. 3, p. 163-246.

- (2) ——— The birds of North and Middle America: a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the Isthmus of Panama, the West Indies and other islands of the Caribbean Sea, and the Galapagos Archipelago. Wash. Gov't print. office, 1901-date. (In U. S. Nat. Mus. Bull. no. 50)

Pts. 1-8, pub. between 1901 and 1919. The standard work in the field.

- RIVES, W[illiam] C[abell]. A catalogue of the birds of the Virginias. Newport, R. I., Oct. 1890. 100 p. (In Newport Nat. Hist. Soc. Proc. 1889-90. Doc. no. 7)

Early accounts of the birds of Va., p. 9-21.

Recent list of Virginia ornithology, p. 22-4.

- (1) ROBINSON, John. Sketch of some of the early botanists of Essex County, Mass. Salem, 1880. (In Essex Inst. Bull. no. 12. p. 87-97)

- (2) ——— The progress of botany in Essex County during the last half century, especially as influenced by the Essex County Natural History Society and the Essex Institute: 1834-84. Salem, July-Dec. 1884. (In Essex Inst. Bull. v. 16, p. 122-32)

See ESSEX CO. NAT. HIST. SOC. (1833); & ESSEX INST. (1848)

ROCKWELL, Robert B. The history of Colorado ornithology. Hollywood, Cal., Jan.-Feb. 1909. (In Condor. v. 11, p. 24-32, maps)

Review of the work achieved by exploring expeditions and the various individual workers. See also note, p. 67-8.

ROGERS, Henry D[arwin]. [... Brief history of the recent labors of American geologists and a rapid survey of the present condition of geological research in the United States ...] (In Amer. J. Sc. v. 47, p. 137-60, 247-78. July & Oct. 1844)

An address delivered before the Amer. Assoc. Geol. & Nat. (1840), q.v., May 10 & 11, 1844. Also pub. separately. N. Y. Wiley & Putnam, 1844. 53 + 43 p.

ROTHROCK, Joseph T[rimble]. The Biological School. Wash. 1893. (In Thorpe, F. N., ed. Benjamin Franklin & the University of Pennsylvania. Chapter 13, p. 327-42)

Bureau of Education. Circular of Information. no. 2, 1892.

Historical sketch of the progress of natural history studies at the University from the earliest days.

ROYAL SOCIETY OF LONDON. Catalogue of scientific papers: 1800-1900. London, The Royal Society, 1867-date. v. 1-date. 4°.

Up to 1918, 16 volumes (v. 16 ends at Marbutt)

v. 1- 6 for 1800-1863 pub. 1867-72

7- 8 " 1864-1873 " 1877-79

9-11 " 1874-1883 " 1891-96

12- " 1800-1883 " 1902 (Suppl.)

13-16 " 1884-1900 " 1914-18

The monumental bibliography of the sciences. The author volumes up to 1918 were in 16 volumes. The subject index for natural history has not yet appeared. The International Catalogue of Scientific Literature is continuing the work from 1900-date.

See above INTERN. CAT. SC. LIT.

RUSBY, Henry H[urd]. An historical sketch of the development of botany in New York City. (In Plant World. v. 9, p. 153-61, 186-91, port. pl. July-Aug. 1906)

Repr. with slight changes from (Torreya. v. 6, no. 6-7, p. 101-111, 133-45, June-July, 1906). Rd. before Torrey Bot. Club, May 23, 1906.

RUSCHENBERGER, William Samuel Waithman. A notice of the origin, progress and present condition of the Academy of Natural Sciences of Philadelphia. Philadelphia, 1852. 78 p.

Rd. before the Academy, Feb. 10, 1852. 2d ed., Phila. 1860. 102 p. See also Phila. Acad. Nat. Sc. (1812)

RUSSELL, Israel. ... Correlation papers: the Newark system ... Wash. Gov't print. office, 1892. 344 p. (In U. S. Geol. Surv. Bull. no. 85)

(1) Names and correlations applied to the whole or to portions of the Newark system.

(2) Index to the literature of the U. S. (Arranged in a dictionary alphabet). p. 133-339.

- (1) RYDBERG, Per Axel. . . . Scandinavians who have contributed to the knowledge of the flora of North America. New York, 1907. (In N. Y. Bot. Gard. Contrib. v. 5, no. 100. p. [5]–49)
Repr. from (Augustana College, Rock Island, Illinois. Library. Pub. no. 6. 1907. 49 p.)
 - (2) ——— Linnaeus and American botany . . . (In Science. n. s. v. 26, p. 65–71. July 19, 1907)
Address delivered at N. Y. Bot. Gard. May 23, 1907, at the commemoration of the 200th anniversary of the birth of Linnaeus by the N. Y. Acad. Sc.
- SABIN, Joseph. A dictionary of books relating to America from its discovery to the present time. N. Y. Joseph Sabin, 1868–92. 20 v.
Alphabet of authors, which ends at Smith in v. 20. The classic work in its field. Its completion is contemplated.
- SAGE, John Hall, BISHOP, L. B., and BLISS, W. P. Bibliography of the birds of Connecticut. Hartford, 1913. (In Conn. Geol. & Nat. Hist. Surv. Bull. no. 20. p. 200–57)
Alphabetically by authors.
- SAMPSON, F[rancis] A[sbury]. . . . A bibliography of the geology of Missouri. Jefferson City, Mo., 1890. 158 + 18 p. (In Missouri Geol. Surv. Bull. no. 2)
See also Missouri Geol. Surv. (1853)
Annotated list of 810 titles arranged by the names of the media of publication, with author, subject and chronologic indexes.
- SARGENT, Charles Sprague. The silva of North America: a description of the trees which grow naturally in North America exclusive of Mexico, by C. S. Sargent . . . illustrated with figures and analyses drawn from nature by Charles Edward Faxon and engraved by Philibert and Eugene Picart. Bost. & N. Y. Houghton, Mifflin, 1891–1902. 14 v. illus. pl. 4°.
History of books devoted to N. A. trees, pref. v. 1, p. 5–8. Footnotes contain brief sketches of American botanists.
- SAUL, John A. Tree culture; or, A sketch of nurseries in the District of Columbia. Washington, 1907. (In Columbia Hist. Soc., Wash., D. C. Records, v. 10, p. 38–62, pl. port.)
Historical account of the various horticulturists and botanists and their work.
- SCHARF, J[ohn] Thomas, and WESTCOTT, Thompson. Libraries and historical and scientific societies of Philadelphia. Phila., 1884. (In their History of Philadelphia. v. 2, p. 1173–1229)
AMERICAN PHILOSOPHICAL SOCIETY (1769), q.v., p. 1190–94.
ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA (1812), q.v., p. 1199–1206.
- SCHMECKEBIER, L[aurence] F[rederick]. Catalogue and index of the publications of the Hayden, King, Powell, and Wheeler surveys; namely, Geological and geographical survey of the Territories; Geological exploration of the fortieth parallel; Geographical and geological surveys of the Rocky Mountain

region; Geographical surveys west of the one hundredth meridian. Wash. Gov't print. off., 1904. 208 p. (In U. S. Geol. Surv. Bull. 222)

Contains many references to previous explorations and surveys conducted prior to the surveys enumerated above.

- (1) SCHUCHERT, Charles. A century of geology—the progress of historical geology in North America. (In Amer. J. Sc. ser. 4, v. 46, art. 2, p. 45–103. July, 1918)

Repr. in (A) CENTURY of Science in America. New Haven, 1918. ch. 2, p. 60–121. See CENTURY, above.

- (2) ——— A synopsis of American fossil Brachiopoda including bibliography and synonymy. Wash. Gov't print. office, 1897. 464 p. (In U. S. Geol. Surv. Bull. no. 87)

chapter 6: Index and bibliography, p. 138–464. Arranged alphabetically by genera and species.

- (1) SCHWARZ, E[ugene] A[mandus]. North American publications on entomology. Wash. 1890. (In Ent. Soc. Wash. Proc. v. 2, no. 1, p. 5–23)

Historical review of the progress of this science from the earliest days, with emphasis on the most important publications.

- (2) ——— . . . An enumeration of the published synopses, catalogues, and lists of North American insects; together with other information intended to assist the student of American entomology. Wash. Gov't print. office, 1888. 77 p. (In U. S. Dept. Agric. Div. Entomology. Bull. ser. 1, no. 19)

Classified list.

SCLATER, William Lutley. A history of the birds of Colorado. London, Witherby, 1912. 24 + 576 p.

Contains a bibliography, alphabetically by authors, p. 533–51.

SCRIBNER, Frank Lamson-. Southern botanists. (In Torrey Bot. Club. Bull. v. 20, p. 315–34. Aug. 1893)

Interesting account of the leading workers who have contributed to the knowledge of southern U. S. botany.

- (1) SCUDDER, Samuel Hubbard. . . . Catalogue of scientific serials of all countries including the transactions of learned societies, in the natural, physical, and mathematical sciences, 1663–1876. Cambridge, Mass., Library of Harvard Univ., 1879. 12 + 358 p. (In Harvard Univ. Library. Special Pub. no. 1)

Arranged alphabetically by the names of the places of publication. American serials, 426 titles, are on p. 263–91.

- (2) ——— The entomological libraries of the United States. Cambridge, Mass., Library of Harvard Univ., 1880. 6 p. (In Harvard Univ. Library. Bibliog. Contrib. no. 11)

Repr. from Univ. Library. Bull. no. 14.

Survey of the contents and facilities of the various entomological library collections of the day.

- (3) ——— . . . A classed and annotated bibliography of fossil insects. Wash. Gov't print. office, 1890. 101 p. (In U. S. Geol. Surv. Bull. no. 69)
Classified section, p. 9-98. Index of authors, p. 99-101. This is a continuation of his "Bibliography of insects . . ." Cambridge, Mass., 1882. 47 p. (In Harvard Univ. Library. Bibliog. Contrib. no. 13). Repr. from the Harvard Univ. Bull.
- (4) ——— ed. Entomological correspondence of Thaddeus William Harris, M.D. Bost. 1869. 43 + 375 p. 4 pl. (In Bost. Soc. Nat. Hist. Occas. Papers. v. 1)
Memoir of HARRIS, by T. W. HIGGINSON, pref. p. 11-37; List of writings, pref. p. 38-47; Correspondence with N. M. Hentz, p. 1-107; With F. E. Melsheimer, p. 109-17; with Edward Doubleday, p. 119-80; with E. C. Herrick, p. 181-207; with J. L. Le Conte, p. 209-37; Miss M. H. Morris, p. 239-48; Miscellaneous, p. 250-64; Appx. p. 265-375.
- (5) ——— Alphabetical index to North American Orthoptera described in the eighteenth and nineteenth centuries . . . Bost. 1901. 7 + 436 p. (In Bost. Soc. Nat. Hist. Occas. Papers. v. 6)
Index, p. 1-348; Literature cited (alphabetically by authors), p. 349-99. Index to specific names, p. 401-36.
- (6) ——— Nomenclator zoologicus—an alphabetical list of all generic names that have been employed by naturalists for recent and fossil animals from the earliest times to the close of the year 1879 . . . in two parts; I: Supplemental list; II: Universal index. Wash. Gov't print. office, 1882. 19 + 376 + 340 p. (In U. S. Nat. Mus. Bull. no. 19)
I: Supplemental list of genera in zoology: List of generic names employed in zoology and palaeontology to the close of the year 1879, chiefly supplemental to those catalogued by Agassiz and Marschall, or indexed in the Zoological Record. 376 p.
II: Universal index to genera in zoology: Complete list of generic names employed in zoology and palaeontology to the close of the year 1879, as contained in the Nomenclators of Agassiz, Marschall and Scudder, and in the Zoological Record. 341 p.
Suppl. in WATERHOUSE, C. O. Index Zoologicus. Lond. 1902. 402 p. & Lond. 1912. 324 p.
- (7) ——— Catalogue of the Orthoptera of North America described previous to 1867, prepared for the Smithsonian Institution. Wash. 1868. 20 + 89 p. (In Smith. Inst. Misc. Coll. v. 8) Pub. no. 189.
Authorities, p. 5-20 (pref.) Cont. in SCUDDER, S. H. Catalogue of the described Orthoptera of the United States and Canada. Davenport, Ia., Oct. 18, 1899. (In Davenport Acad. Nat. Sc. Proc. v. 8, p. 1-101)
- (8) ——— Historical sketch of the generic names proposed for butterflies, a contribution to systematic nomenclature. Salem, Naturalist's Agency, 1875. (In Amer. Acad. Arts & Sc. Proc. v. 10 (ser. 2, v. 2), p. 91-293)
- SEEVER, William J. Missouri Historical and Philosophical Society: 1844-51. (In Missouri Hist. Soc. Coll. v. 2, p. 5-11. Jan. 1900)
See also Missouri Hist. & Phil. Soc. (1844)

- (1) SELLARDS, E[lias] H[oward]. Bibliography of Florida geology. 1908. (In Florida Geol. Surv. First Ann. Rept. 1908. p. 73-108)
See also Florida Geol. Surv. (1853)
 - (2) ——— Geological investigations in Florida previous to the organization of the present Geological Survey. (In Florida Geol. Surv. First Ann. Rept. 1908. p. 54-72)
See also Florida Geol. Surv. (1853)
- SEWARD, William Henry. Progress of the natural sciences in New York State. Albany, 1842. (In Nat. Hist. N. Y. Pt. 1: Zoology. v. 1, introd. p. 165-78)
Historical account of the contributions to the knowledge of the natural history of the state up to the period of the great Natural History Survey carried on between 1836-1842. See N. Y. Nat. Hist. Surv. (1836)
- SHALER, Nathaniel Southgate. Operations of the Survey from 1854 to 1860. Frankfort, 1877. (In Kentucky Geol. Surv. Repts. of Progress. ser. 2, v. 3, pt. 2, p. 33-43 (p. 3-13))
See also KENTUCKY GEOL. SURV. (1854)
- (1) SHATTUCK, George Burbank. Development of knowledge concerning the physical features of Cecil County, with bibliography. Baltimore, 1902. (In Maryland Geol. Surv. Cecil Co. p. 31-62)
History, p. 31-48; Bibliography, p. 49-62. See also MARYLAND GEOL. SURV. (1833), for this and the following entries under SHATTUCK.
 - (2) ——— The Miocene: geological and palaeontological relations, with a review of earlier investigations. Baltimore, 1904. (In Maryland Geol. Surv. Miocene. pref. p. 33-64)
History, pref. p. 33-41; Bibliography, chronologically arranged, p. 41-64.
 - (3) ——— The Pliocene and Pleistocene deposits of Maryland. Baltimore, 1906. (In Maryland Geol. Surv. Pliocene & Pleistocene. p. 25-56)
Historical review, p. 25-40; Bibliography, chronologically arranged, p. 40-56.
 - (4) ——— Development of knowledge concerning the physical features of Calvert County, with bibliography. Baltimore, 1907. (In Maryland Geol. Surv. Calvert Co. p. 27-53)
History, p. 27-38; Bibliography, p. 39-53.
 - (5) ——— Development of knowledge concerning the physical features of St. Mary's County, with bibliography. Baltimore, 1907. (In Maryland Geol. Surv. St. Mary's Co. p. 25-53)
History, p. 25-38; Bibliography, p. 38-53.
- SHEAR, C[ornelius] L[ott], and STEVENS, Neil E[verett]. The correspondence of Schweinitz and Torrey. (In Torrey Bot. Club. Memoirs. v. 16, p. 119-300, 2 pl. July 16, 1921)
Bibliographical section, by Miss Florence P. Smith, p. 282-89. Biographical notices of persons mentioned, by Dr. J. H. Barnhart, p. 290-300.

SHECUT, John Linnaeus Edwards Whitridge. Historical and literary sketch of Charleston. Charleston, S. C., 1819. (In SHECUT'S Medical and philosophical essays. p. 39-55)

An early review of what had been accomplished in science in Charleston up to that time, with especial reference to the Charleston Museum (1773), q.v.; The Literary & Philosophical Society of S. C. (1813), q.v.; and the Charleston Botanic Society & Garden (1805), q.v.

- (1) SHERBORN, Charles Davies. . . . An index to the genera and species of the Foraminifera . . . Wash., Smithsonian Institution, Nov. 1893 & Feb. 1896. 4 + 485 p. (In Smith. Inst. Misc. Coll. v. 37.) Pub. no. 856 & 1031.

In 2 parts.

Pt. 1, Nov. 1893, A-Non. p. 1-240.

2, Feb. 1896, Non-Z 4 + p. 241-485.

Includes material through 1889.

- (2) ——— Index animalium sive index nominum quae ab A.D. MDCCLVIII (1758) generibus et speciebus animalium imposita sunt; societatis eruditorum adiuvantibus a Carolo Davies Sherborn; sectio prima a kalendis Januariis MDCCLVIII (1758) usque ad finem Decembris MDCCC (1800). Cambridge, England, 1902. 59 + 1195 p.

Bibliography, pref. p. 11-56, arranged alphabetically by species.

Pt. 1, p. 1-1071 Index nominum animalium.

Pt. 2, p. 1073-1195 Index to generic names showing the trivial names, associated with each, from 1758 to 1800.

SHORT, Charles Wilkins. A sketch of the progress of botany in western America. (In Transylvania Jour. Med. & Assoc. Sc. Lexington, Ky., Aug. 1836. v. 9, p. 324-50)

By the leading botanist west of the Alleghanies of that period. See also v. 8, no. 4, p. 553-74. Dec. 1835, for other notices.

SHUMARD, Benjamin Franklin. . . . A chronological list of works which contain descriptions or notices of North American Palaeozoic Echinodermata. St. Louis, Aug. 1865. (In Acad. Sc. St. Louis. Trans. v. 2, p. 335-41)

- (1) SILLIMAN, B[enjamin]. [. . . Of the dignity and importance of geology; of its object, means and ends; of its progress and present condition, especially in the United States; of its desiderata and difficulties; and of some of the powers or dynamics by which its results are produced.] (In Amer. J. Sc. v. 43, p. 217-50. Oct. 1842)

Read before the Amer. Assoc. Geol. & Nat. (1840), q.v., April 26, 1842. Also pub. separately N. Y. Wiley & Putnam, 1842. 36 + 39 p.

- (2) ——— . . . Progress of science in the United States . . . New Haven, April, 1847. (In Amer. J. Sc. v. 50, pref. p. 3-9)

In connection with the completion of the 50th volume of the AMERICAN JOURNAL OF SCIENCE (1818), q.v.

SKINNER, Henry. One hundred years of entomology in the United States. Brussels, Aug. 1911. (In Premier Congres International d'Entomologie, Aug. 1910. p. 425-32)

Brief historical account.

- SMALL, John K[unkel]. Cactus hunting on the coast of South Carolina. (In N. Y. Bot. Gard. Jour. v. 18, p. 237-46. Nov. 1917)
Contains biographical sketches of the chief S. C. botanists, in foot-notes, by J. H. BARNHART, p. 239-43.
- (1) SMITH, Eugene Allen. Geological surveys in Alabama. (In Jour. of Geol. v. 2, no. 3, p. 275-87. Apr.-May, 1894)
See also ALABAMA GEOL. SURV. (1848).
- (2) ———— Pioneers in gulf coast plain geology. N. Y. Mar. 30, 1914. (In Geol. Soc. America. Bull. v. 25, p. 157-78)
The Presidential Address.
- (3) ———— Historical sketch of geological surveys in Alabama. Montgomery, Ala., 1875. (In Ala. Geol. Surv. Rept. for 1874. p. 9-13)
See also ALABAMA GEOL. SURV. (1848)
- SMITH, George Otis. A century of government geological surveys. (In Amer. J. Sc. ser. 4, v. 46, art. 5, p. 171-92. July, 1918)
Repr. in (A) CENTURY of Science in America. New Haven, 1918. ch. 5, p. 193-216. (See CENTURY above)
Review of the various state surveys and federal exploring expeditions leading up to the formation of the United States Geological Survey.
- SMITH, J[ohn] B[ernhard]. Insects and entomologists, their relation to the community at large: part 2. (In Popular Sc. Monthly. v. 76, p. 467-77. May, 1910)
Biographical sketches, with portraits of the most prominent American entomologists.
- SMITHSONIAN INSTITUTION. . . . Catalogue of publications of societies and of periodical works belonging to the Smithsonian Institution, January 1, 1866, deposited in the Library of Congress. Wash. 1866. 591 p. (In Smith. Inst. Misc. Coll. v. 9)
American serials, p. 480-591.
See also, Smith. Inst. (1846)
- SPAULDING, Perley. A biographical history of botany at St. Louis, Missouri. (In Popular Sc. Monthly. v. 73, p. 488-99; Dec. 1908; & v. 74, p. 48-57, 124-33, 240-58, port., 1909)
Excellent study of the botanical labors of all those who have contributed to a knowledge of the botany at St. Louis, with numerous portraits.
- STANDLEY, Paul C. A bibliography of New Mexican botany. Washington, 1910. (In U. S. Nat. Herbarium. Contrib. v. 13, pt. 6, p. 229-46)
Annotated list arranged alphabetically by author.
- STARR, Frederick. The Academy of Natural Sciences of St. Louis. (In Popular Sc. Monthly. v. 52, p. 629-47. March, 1898)
Interesting account of the beginnings of the Society, with biographical sketches of the founders. See ACADEMY OF SCIENCE OF ST. LOUIS (1856).
- (1) STEVENS, Neil E[verett]. Two southern botanists and the Civil War. (In Scientific Mthly. v. 9, p. 157-66. Aug. 1909)

Correspondence between M. A. Curtis, and H. W. Ravenel, to Edward Tuckerman.

- (2) ——— Radicalism and research in America. (In *Science*. n. s. v. 52, p. 25-30. July 9, 1920)

Brief historical sketch of the progress of radical views in the development of natural sciences in the U. S.

STILES, Ch[arles] Wardell, and HASSALL, Albert. . . . Index-catalogue of medical and veterinary zoology . . . subjects Cestoda and Cestodana. Washington, Gov't print. office, 1912. 467 p. (In U. S. Hygienic Laboratory. Bull. no. 85)

Alphabetical list of specific and subspecific names, p. 12-89; Bibliography of subgeneric, generic and specific names . . . p. 90-461.

STOCKBRIDGE, Helen E[lvira]. A bibliography of the Southern Appalachian and White Mountain ranges. Wash., D. C., 1911. (In Society of American Foresters. Proc. v. 6, no. 2, p. 173-254)

A classified comprehensive list covering the geology, botany, mineralogy, etc., of the regions indicated.

STONE, Ralph W[alter]. Geologic work in Pennsylvania. . . . Harrisburg, Pa., 1908. (In Pennsylvania Topogr. & Geol. Surv. 1906-8. p. 83-98)

History of the 1st Geol. Surv. p. 83-7.

History of the 2d Geol. Surv. p. 87-98.

See PENNSYLVANIA GEOL. SURV. (1836)

- (1) STONE, Witmer. Philadelphia to the coast in early days and the development of western ornithology prior to 1850. Hollywood, Cal., Jan.-Feb. 1916. (In *Condor*. v. 18, no. 1, p. 3-14)

Rd. before 33rd meeting of Amer. Ornith. Union, May 18, 1915, at San Francisco. Reviews the labors of Peale, Say, Gambel, Heerman, Townsend, Nuttall & J. G. Bell.

- (2) ——— Some Philadelphia ornithological collections and collectors, 1784-1850. (In *Auk*. v. 16, p. 166-77. Apr. 1899)

Rd. before 16th Congress, A. O. U. Nov. 15, 1898. Includes a good account of Peale's Museum (1784), q.v.

STRONG, W[illiam] C., and others. History of the Massachusetts Horticultural Society: 1829-1878. Bost. 1880. 8 + 545 p. port.

Sketch of the history of horticulture in the U. S. up to 1829, p. 1-54.

SWALLOW, G[eorge] C[linton]. What was known of our geology. Jefferson City, Mo., 1855. (In Missouri Geol. Surv. 1st & 2d Ann. Rept. appx. A. p. 209-12)

See also MISSOURI GEOL. SURV. (1853)

TEDDER, Henry R[ichard]. Societies learned. Cambridge, England, 1910-11. v. 25, p. 309-19

(In *Encyc. Brit.* 11th-12th ed.)

American societies, p. 309-10.

THAYER, Evelyn, and KEYES, Virginia. Catalogue of a collection of books on

ornithology in the library of John E. Thayer; compiled by . . . Boston. Privately printed, 1913. 187 p.

Alphabetically by author.

THOMPSON, D'Arcy W[entworth]. A bibliography of Protozoa, Sponges, Coelenterata, and worms, including also the Polyzoa, Brachiopoda and Tunicata, for the years 1861-1883. . . . Cambridge, England, Univ. Press, 1885. 8 + 284 p.

Classified list arranged alphabetically by author under each subject. Continuation of the Bibliography of CARUS & ENGELMANN (q.v. above)

THOMPSON, J[ames] David. Handbook of the learned societies and institutions: America; compiled under the direction of J. D. Thompson. Wash. Carnegie Inst. Wash., 1908. 592 p. (In Carnegie Inst. Wash. Pub. no. 39)

National societies, p. 3-95; Local societies, p. 97-425. Brief historical notices and bibliographical references to the history of the institutions.

(1) THWAITES, Reuben Gold. A brief history of Rocky Mountain exploration with especial reference to the expedition of Lewis and Clark. N. Y. D. Appleton & Co., 1904. 13 + 276 p. illus. pl. port.

See also Lewis & Clark Exped. (1804)

(2) ————— ed. Early western travels, 1748-1846; a series of annotated reprints of some of the best and rarest contemporary volumes of travel, descriptive of the aborigines and social and economic conditions in the Middle and far West, during the period of early American settlement; edited, with notes, introduction, index, etc., by Reuben Gold Thwaites . . . Cleveland, The A. H. Clark Co., 1904-7. 32 v. illus. pl. port. plans, facsim. maps, tab.

A series of the greatest importance containing the journals and accounts of 35 different individuals. Replete with details concerning the geography, and the natural history of the various parts of the country traversed.

Contents:

- v. 1 Journals of Conrad Weiser (1748),
George Croghan (1750-65),
Christian Frederick Post (1758),
Thomas Morris (1764)
- 2 John Lang's Journal, 1768-1782
- 3 André Michaux's Travels into Kentucky, 1793-96
Francois Michaux's Travels west of the Alleghany Mountains, 1802
- 4 Cumming's Tour to the western country (1807-1809)
- 5 Bradbury's Travels in the interior of America, 1809-1811
- 6 Brackenridge's Journal up the Missouri, 1811—Franchère's Voyage to Northwest Coast, 1811-1814
- 7 Ross's Adventures of the first settlers on the Oregon or Columbia River, 1810-1813
- 8 Buttrick's Voyages, 1812-1819
Evan's Pedestrious tour, 1818
- 9 Flint's Letters from America, 1818-1820
- 10 Hulme's Journal, 1818-19
Flower's letters from Lexington and the Illinois: 1819
Woods's Two years residence, 1820-21
- 11 pt. 1 (1819) of Faux's Memorable days in America, 1819-1820

- 12 pt. 2 (1820) of Faux's Memorable days in America, 1819-1820
Welby's Visit to North America, 1819-20
- 13 Nuttall's Travels into the Arkansas territory, 1819
- 14-17 Pt. 1-4 of James's Account of S. H. Long's Expedition, 1819-1820.
see Long's Exped. to the Rockies (1819)
- 18 Pattie's Personal narrative, 1824-1830
Willard's Inland trade with New Mexico, 1825, and Downfall of the
Fredonian Republic; and Malte-Brun's Account of Mexico.
- 19 Ogden's letters from the West, 1821-23
Bullock's Journey from New Orleans to New York, 1827
pt. 1 of Gregg's Commerce of the Prairies, 1830-1839
- 20 pt. 2 of Gregg's Commerce of the Prairies
- 21 Wyeth's Oregon; or, A short history of a long journey, 1832; and
Townsend's Narrative of the journey across the Rocky Mountains, 1834
- 22 pt. 1 of Maximilian, Prince of Wied's Travels in the interior of North
America: 1832-1834.
- 23 pt. 2 of Maximilian's Travels . . .
- 24 pt. 3 of Maximilian's Travels . . .
- 25 Comprising the series of original paintings by Charles Bodmer to illu-
strate Maximilian's Travels . . .
- 26 pt. 1 of Flagg's "The Far West," 1836-37
- 27 pt. 2 of Flagg's "The Far West" & De Smet's Letters and sketches,
1841 & 1842
- 28 pt. 1 of Farnham's Travels in the great Western prairies, May 21-
Oct. 16, 1839
- 29 pt. 2 of Farnham's Travels . . . Oct. 21-Dec. 4, 1839 & De Smet's
Oregon missions and travels over the Rocky Mountains, 1845-1846
- 30 Palmer's Journal of Travels over the Rocky Mountains, 1845-1846.
- 31 & 32 Analytical index to the series.

TILDEN, Josephine E. A contribution to the bibliography of American algae.
Minneapolis, Aug. 26, 1895. (In Minn. Bot. Studies. v. 1, no. 23, p. 295-421)
Alphabetically by authors. Contains 1544 entries.

TODD, J[ames] E[dward]. Historical sketch of explorations in South Dakota.
Sioux Falls, S. D., 1894. (In South Dakota Geol. Surv. Bull. no. 1, p. 3-5)

TORREY, John. Historical sketch of the progress of botany in New York State.
Albany, 1843. (In Nat. Hist. N. Y. Div. 2: Botany. v. 1, pref. p. 1-3)
See also NATURAL HISTORY SURV. N. Y. (1836)

TORREY BOTANICAL CLUB. Botanical directory, for North America and the
West Indies: part 1-2. (In Torrey Bot. Club. Bull. v. 4, no. 11, p. 49-59.
Nov. 1873)

Suppl. in Bull. v. 5, no. 12, 4 p. Dec. 1874.
List of the principal workers of the period.

TOWNSEND, Charles Wendell. Ornithological history of Essex County: 1616-
1904 (and bibliography). Cambridge, Mass., Apr. 1905. (In Nuttall Ornith.
Club. Mem. no. 3, p. 60-73, 322-31)

(1) TRELEASE, William. The progress made in botany during the nineteenth
century. St. Louis, Nov. 1901. (In Acad. Sc. St. Louis. Trans. v. 11, p.
125-42)

A general theoretical summary. Address before the Academy, Nov. 8, 1901.

- (2) ——— The Academy of Science of St. Louis: a biography. (In Pop. Sc. Mthly. v. 64, p. 117-30. Dec. 1903)
Historical review of the foundation and subsequent history and activities of the Academy.
See also ACAD. SC. ST. LOUIS (1856)
- (3) ——— The Missouri Botanical Garden. (In Pop. Sc. Mthly. v. 62, p. 193-221. Jan. 1903)
Historical sketch of the Garden founded in St. Louis by Henry Shaw.
- TROTTER, Spencer. An inquiry into the history of the current English names of North American land birds. Washington, 1910. (In Smith. Inst. Ann. Rept. for 1909. p. 505-19)
Repr. from the Auk. v. 26, no. 4, p. 346-62. Oct. 1909.
- TROUESSART, E. L. Catalogus mammalium tam viventium quam fossilium. Berlin, Friedlander & Son, 1897-99. 1469 p.
Supplement pub. Berlin, 1904-5. 7 + 929 p.
- TROUT, L. E., and MYERS, George H. . . . Bibliography of Oklahoma geology with subject index. Norman, Okla., July, 1915. 105 p. (In Okla. Geol. Surv. Bull. no. 25)
Covers period 1791-1915. Alphabetically by author, p. 10-80. Index, p. 81-105.
- TRÜBNER, Nicholas. Bibliographical guide to American literature: a classed list of books published in the United States of America during the last forty years; with bibliographical introduction, notes and alphabetical index. . . London, Trübner & Co., 1859. 149 + 554 p.
Books on natural history, p. 147-92. Valuable particularly for the thorough bibliographical introduction (not in 1st ed.). Contains collation of the leading scientific serials.
1st ed., 1855. 32 + 108 p.
- (1) TRUE, Rodney H[oward]. Thomas Jefferson in relation to botany. (In Scientific Mthly. v. 3, no. 4, p. 345-60, port. Oct. 1916)
Account of the part played by Jefferson in the organization of the Lewis & Clark Expedition, and in other matters pertaining to natural history.
- (2) ——— Beginnings of agricultural literature in America. Chicago, Ill., July, 1920. (In American Library Association. Papers & Proceedings Colorado Springs Conference. Bull. v. 14, no. 4, p. 186-94)
Rapid review of the leading workers and pioneers in the advancement of agricultural and natural history knowledge. Bibliographical references in foot-notes.
- (1) TRYON, George, Jr. List of American writers on recent conchology, with the titles of their memoirs and dates of publications. N. Y. Bailliere Bros., 1861. 68 p.
Alphabetically by authors, with entries under each arranged by the medium of publication.

- (2) ——— A sketch of the history of conchology in the United States. (In Amer. J. Sc. ser. 2, v. 33, p. 161–80. Mar. 1862)
By one of the foremost conchologists of the time and one of its most enthusiastic supporters.
- TUCKER, Ethelyn Maria. . . . Catalogue of the Library of the Arnold Arboretum of Harvard University; compiled under the direction of Charles Sprague Sargent . . . Cambridge, Mass., Arnold Arboretum, 1914–17. 2 v. 4°. (Arnold Arboretum. Pub. no. 6)
v. 1 Serial publications authors & titles. 782 p. 1914.
2 Subject index. 1917. 8 + 44 + 542 p.
Library of over 30,000 publications relating to botany, dendrology, etc.
- TUCKERMAN, Edward. Early writers on American botany. Worcester, Mass., 1860. (In Amer. Antiq. Soc. Archaeologia Americana. v. 4, p. 115–31)
Part of an "Introduction to a reprint of John Josselyn's 'New England rarities,' pub. 1672." Epitome of the work of colonial writers on American botany.
- TYLER, Lyon G[ardiner]. Virginia's contribution to science. Worcester, Mass., Oct. 1915. (In Amer. Antiq. Soc. Proc. n. s. v. 25, p. 358–74)
Rapid survey of the principal scientific workers in Virginia since colonial times.
- (1) UNDERWOOD, Lucien Marcus. A review of the literature of the North American Myriapoda. Wash. The Smithsonian Institution, 1893. (In U. S. Nat. Mus. Bull. no. 46, p. 9–17)
Alphabetical bibliography, p. 13–7.
- (2) ——— . . . Bibliography of Indiana botany. Brookville, Indiana, 1894. (In Indiana Acad. Sc. Proc. 1893. p. 20–30)
Alphabetically by author.
- (3) ——— Index Hepaticarum: part 1. N. Y. 1893. (In Torrey Bot. Club. Mem. v. 4, no. 1, p. 1–91)
Issued June 10, 1893. Alphabetically by author. Subject & geographical indexes.
- (4) ——— The progress of our knowledge of the flora of North America. (In Pop. Sc. Mthly. v. 70, p. 497–517, facsim. June, 1907)
Rapid historical survey.
- (5) ——— The progress of arachnology in America. (In Amer. Nat. v. 21, p. 963–75. Nov. 1887)
Historical sketch.
- (6) ——— The last quarter—a reminiscence and an outlook. (In Science. n. s. v. 12, p. 161–70. Aug. 3, 1900)
Presidential address before the Botanical Society of America.
First pages contain a rapid survey of the progress of botany in the United States.
- (1) UPHAM, Warren. History of explorations among the White Mountains. Concord, N. H., 1874. (In HITCHCOCK, C. H. Geol. N. H. v. 1, ch. 4, p. 59–118)

- (2) ——— Explorations and surveys of the Minnesota and Red Rivers. Cedar Rapids, Iowa, 1914. (In Miss. Valley Hist. Assoc. Proc. 1913-1914. v. 7, p. 82-92)
Historical sketch.
- VAN AMRINGE, H[enry] H[amlin]. . . . Sketch of the advances made in Chester County, Pa., in the study of natural science . . . West Chester, Pa., 1828. 8 p. (In his Report on the progress and condition of the Chester County Cabinet of Natural Sciences)
See also CHESTER CO. CAB. NAT. SC. (1826) : History.
- VAN HISE, Charles Richard. . . . Correlation papers: Archæan and Algonkian . . . Pre-Cambrian rocks of North America. Wash. Gov't print. office, 1892. 549 p. (In U. S. Geol. Surv. Bull. no. 86)
History and literature of work done on Lake Superior region. p. 51-156. Work done in eastern states. p. 348-439. Repub. with revisions in entry given below (VAN HISE & LEITH: (1))
- (1) VAN HISE, Charles Richard, and LEITH, Charles Kenneth . . . Pre-Cambrian geology of North America. Wash. Gov't print. office, 1909. 939 p. (In U. S. Geol. Surv.)
"Our purpose is to give an account of the present state of knowledge of the general structure and correlation of the Pre-Cambrian." The history and bibliography of the subject are distributed throughout the work under the respective regions treated. First pub. by VAN HISE, C. R. in (U. S. Geol. Surv. Bull. no. 86, 1892. 549 p.). See preceding entry.
- (2) ——— History of geologic work in the Lake Superior region. Wash. Gov't print. office, 1911. (In U. S. Geol. Surv. Monographs. v. 52, ch. 3, p. 70-84)
Classified bibliography, p. 73-84.
- VASEY, George. National Herbarium at Washington. (In Bot. Gaz. v. 11, no. 6, p. 153-56. June, 1886)
Based on the collections made by the various early exploring expeditions conducted during the forties and fifties.
See also National Bot. Garden (1852)
- VENABLE, William H. History of the Historical and Philosophical Society of Ohio. (In Mag. Western Hist. v. 3, no. 5, p. 499-506. March, 1886)
- (1) VOGDES, Anthony Wayne. A classified and annotated bibliography of the Palæozoic Crustacea, 1698-1892, to which is added a Catalogue of North American species. San Francisco, 1893. 413 p. (In Cal. Acad. Sc. Occas. Papers. v. 4. June, 1893)
Contains an author list with an index of species.
Pt. 1 Bibliography; p. 3-252
2 Catalogue of trilobites (index), p. 253-360
3 Non-trilobitic genera & species, p. 361-412
An earlier ed.: . . . A bibliography of Palæozoic Crustacea from 1698 to 1889 including a list of North American species and a systematic arrangement of genera. Wash. 1890. 177 p. (In U. S. Geol. Surv. Bull. no. 63)
Pt. 1 List of authors, p. 11-78

2 Catalogue of trilobites, p. 79-148

3 Catalogue of non-Trilobites, p. 149-77

Cont. as follows: "Palaeozoic Crustacea: the publications and notes on the genera and species during the past twenty years, 1895-1917. San Diego, Cal., 1917. 141 p. 3 pl. illus. (In San Diego Soc. Nat. Hist. Trans. v. 3, no. 1)

- (2) ——— An address . . . on the books relating to the geology, mineral resources and palaeontology of California. (In San Diego Soc. Nat. Hist. Trans. v. 1, no. 1, p. 9-23. 1905)

See also California Geol. Surv. (1853).

- (3) ——— A bibliographical sketch of Doctor John B. Trask, first state geologist of California. (In San Diego Soc. Nat. Hist. Trans. v. 1, no. 2, p. 27-30. 1907)

See also California Geol. Surv. (1853)

- (4) ——— . . . A bibliography relating to the geology, palaeontology, and mineral resources of California . . . San Francisco & Sacramento, June 30, 1903. 290 p. (In Cal. State Mining Bur. Bull. no. 30)

First pub. in Bull. no. 10. San Francisco & Sacramento, 1896. 121 p.

Pt. 1 Publications of State of Cal. p. 9-44

2 " of U. S. Gov't. p. 45-76

3 " of scientific Societies. p. 77-135

4 " of State Geol. Surv. other than Cal. p. 137-39.

5 Miscellaneous publications. p. 141-74.

6 List of published maps of Cal. p. 175-258. Index—269-90.

See also California Geol. Surv. (1853).

- (5) ——— Geological surveys in the state of California. (In Cal. Acad. Sc. Proc. ser. 2, v. 3, p. 325-37. May 3, 1893)

Enumeration of publications relating to the Survey from its inception.

See also California Geol. Surv. (1853)

WADSWORTH, M[arshman] E[dward]. Notes on the geology of the iron and copper district of Lake Superior. Cambridge, Mass., July, 1880. (In Mus. Comp. Zool. Bull. v. 7, Geol. ser. v. 1, no. 1, p. 1-165)

History, p. 1-27; 76-109; Bibliography, p. 133-57.

Partial Bibliography may be found (In Minn. Geol. & Nat. Hist. Surv. 23rd Ann. Rept. Minneapolis, 1895 (for 1894). p. 146-55).

- (1) WALCOTT, Charles D[oolittle]. The Taconic system of Emmons, and the use of the name Taconic in geologic nomenclature. (In Amer. J. Sc. ser. 3, v. 35, p. 229-42, 307-27, 394-401, col. map. Mar.-May, 1888)

(1) The Taconic area and geologic work within it.

(2) Geology of the Taconic area as known at the present time.

(3) Geology of the Taconic area, as known to Dr. Emmons.

(4) Comparison & discussion; (5) Nomenclature.

- (2) ——— . . . Correlation papers: Cambrian. Wash. Gov't print. office, 1891. 447 p. (In U. S. Geol. Surv. Bull. no. 81)

A review of the work of the predecessors in the field, and their publications. Chronologically arranged bibliography, p. 19-48.

- (3) ———— The fauna of the Lower Cambrian or Olenellus zone. Wash. Gov't print. office, 1890. (In U. S. Geol. Surv. 10th Ann. Rept. 1888-89. p. 511-774, illus. pl.)

Bibliography, alphabetically by authors, p. 516-24; Historical review, p. 524-47.

- (1) WARD, Lester Frank. Sketch of palaeobotany. Wash. Gov't print. office, 1885. (In U. S. Geol. Surv. 5th Ann. Rept.: 1883-84. p. 357-452)
- (2) ———— Historical review of opinion of the flora of the Laramie group. Wash. Gov't print. office, 1885. (In U. S. Geol. Surv. 6th Ann. Rept. for 1884-85. p. 406-33)

WARMAN, Philip Creveling. . . . Bibliography and index of the publications of the United States Geological Survey with the laws governing their printing and distribution. Wash. Gov't print. office, 1893. 495 p. (In U. S. Geol. Surv. Bull. no. 100)

Gives the contents of the various publications of the U. S. Geol. Surv. from the beginning to 1880. Continued in Bull. no. 177, for 1880-1901. Wash. 1901. 858 p. Cont. in Bull. no. 215 for 1901-3, Wash. 1903. 234 p. The Survey has played a highly important part in the collection of material concerning the history, bibliography, etc., of the literature of geology and its affiliated sciences.

WARREN, Gouverneur K[emble]. . . . Memoir to accompany the map of the territory of the United States from the Mississippi River to the Pacific Ocean, giving a brief account of each of the exploring expeditions since A.D. 1800, with a detailed description of the method adopted in compiling the general map . . . Washington, 1859. 120 + 4 p. pl. sect. fold. map. 4°. (In Pacific Railroad Surv. v. 11)

Serials no. 768 or 801 in the Serial set of government documents. Report rendered March 1, 1858.

In (U. S. 33d Cong., 2d sess., Sen. Ex. Doc. no. 78. v. 13, pt. 11). Serial no. 768. Also in (U. S. 33d Cong., 2d sess., H. Ex. Doc. no. 91, v. 11, pt. 11). Serial no. 801.

Invaluable as the best guide to the general routes followed by the various expeditions. An epitome of this Memoir is given in WHEELER, G. M. (see below), 1889. pt. 2, p. 513-97.

For contents of the "Memoir," consult PACIFIC RR. SURV. (1853), v. 11.

WARREN, John C[ollins]. Address to the Boston Society of Natural History. Bost. John Wilson & Son, 1853. 48 p.

"Account of the formation and development of the study of natural history in this part of the country." PREFACE. See also BOSTON SOC. NAT. HIST. (1830)

WATERHOUSE, F[rederick] H[erschel]. Index generum avium; a list of the genera and subgenera of birds. London, R. H. Porter, 1889. 3 + 240 p.

Entries arranged alphabetically by genera.

WATSON, Sereno. Bibliographical index to North American botany; or, Citations of authorities for all the recorded indigenous and naturalized species of the flora of North America; with a chronological arrangement of the synonymy: Polypetalae. Washington, March, 1878. 476 p. (In Smith. Inst. Misc. Coll. v. 15)

Incomplete—intended as v. 1. "This work is intended to facilitate the labors of botanists by furnishing references to all the published descriptions of species of the flora of North America . . . Covers the ground of v. 1 of Torrey & Gray's 'Flora of N. A.,' and is complete in itself." Advertisement.

WATSON, Thomas Leonard. A bibliography of the geological, mineralogical and palaeontological literature of the state of Virginia. Ithaca, N. Y., 1897. 109 p. (In Cornell Univ. Bull. Amer. Palaeont. no. 7)

Entries arranged alphabetically by author, p. 7-90. List by subject and year, p. 101-9.

See also VIRGINIA GEOL. SURV. (1835)

WAYNE, Arthur Trezevant. . . . Birds of South Carolina. Charleston, S. C., 1910. 21 + 254 p. map. (In Charleston Museum. Contr. no. I)

History of Ornithology in S. C., in Introd., by P. M. REA, pref. p. 12-21.

Bibliography of S. C. ornithology, p. 227-43.

WEATHERBY, C[harles] A[lfred]. Old time Connecticut botanists and their herbaria. (In Rhodora. Bost. 1904. v. 16, p. 83-90)

Chiefly an account of the herbarium of J. P. Brace.

(1) WEEKS, Fred Boughton. North American geological formation names: bibliography, synonymy and distribution. Wash. Gov't print. office, 1902. 448 p. (In U. S. Geol. Surv. Bull. no. 191)

Contains:

(1) A list of all N. A. sedimentary formation names arranged alphabetically by geographic provinces under each of the larger geologic sub-divisions . . . p. 23-40.

(2) Sedimentary formation names, p. 41-427. Arranged alphabetically.

(2) ——— . . . Bibliography of North American geology, palaeontology, petrology and mineralogy for 1892-1900, inclusive . . . Wash. Gov't print. office, 1902. 717 p. (In U. S. Geol. Surv. Bull. no. 188)

Comprises the contents of the indexes for the individual years contained in Bull. 130, 135, 146, 149, 156, 162 & 172. Alphabetical by author with the Index in next Bull. (see next entry). The work is practically a continuation of DARTON (q.v.)

(3) ——— . . . Index to North American geology, palaeontology, petrology, and mineralogy for the years 1892-1900, inclusive. Wash. Gov't print. office, 1902. 337 p. (In U. S. Geol. Surv. Bull. no. 189)

Index for preceding entry (q.v.)

(4) ——— Bibliography and index of North American geology, palaeontology, petrology, and mineralogy for the years 1901-1905, inclusive. Wash. Gov't print. office, 1906. 770 p. (In U. S. Geol. Surv. Bull. no. 301)

A continuation of WEEKS, F. B. (2) & (3)

WEEKS, Fred Boughton, and NICKLES, John Milton. . . . Bibliography of North American geology for 1906 and 1907 with subject index. Wash. Gov't print. office, 1909. 317 p. (In U. S. Geol. Surv. Bull. no. 372)

Bibliography alphabetically by author, p. 1-208. Index, p. 209-317.

A continuation of WEEKS, F. B., (4), q.v.

- WEEKS, S[tephen] B[eauregard]. A preliminary list of American learned and educational societies. (In U. S. Commiss. Education. Rept. for 1893-94. v. 2, p. 1493-1661)
 Brief information concerning the history, objects, charter members, officers, publications, etc., of the individual institutions. General societies, p. 1511-31; Geographical, geological and mineralogical, p. 1536-38; Biological, p. 1538-51.
- WELLER, Stuart. . . . A bibliographical index of North American carboniferous invertebrates. Wash. Gov't print. office, 1898. 653 p. (In U. S. Geol. Surv. Bull. no. 153)
 Pt. 1 Chronological catalogue of papers containing descriptions and illustrations of N. A. Carboniferous Invertebrates; p. 9-39.
 2 Bibliographic list of genera and species of N. A. Carboniferous Invertebrates, arranged alphabetically; p. 51-653.
- WELLS, David Ames. . . . On the progress of science . . . Boston, 1851-71. (In the Annual of Scientific Discovery. Preface of each volume).
 See Annual of Scientific Discovery (1850)
- WHEATLAND, Henry. On the history of the Essex County Natural History Society, and some of its pioneers in the pursuit of natural history. (In Essex Inst. Proc. v. 2, p. 24-8. 1856)
 See also Essex Co. Nat. Hist. Soc. (1833).
- WHEATON, J. M. . . . Bibliography of Ohio ornithology. Columbus, 1882. (In Geol. Surv. Ohio. Rept. v. 4. Zool. & Bot.: D. p. 594-612)
 Entries arranged chronologically. See also Ohio Geol. Surv. (1837)
- WHEELER, Geo[rge] M[ontague]. . . . Memoir upon the voyages, discoveries, explorations, and surveys to and at the west coast of North America and interior of the United States west of the Mississippi River, between 1500 and 1880 . . . Wash. 1889. (In U. S. Geogr. Surv. West of 100th Meridian. v. 1, appx. F, p. 481-745)
 Comprehensive and valuable study.
 Pt. 1 Geographical discovery and exploration west coast and interior, 1500-1800, with chronological list of expeditions & notes on certain old maps; p. 481-512.
 2 Epitome of Warren's "Memoir" (q.v. above). 1800-1857, with added notes; p. 513-97.
 3 Geographical and geological explorations & surveys, 1857-1880; p. 599-745.
- WHELPLEY, Henry M. A sketch of the history of the Academy of Science of St. Louis. (In Acad. Sc. St. Louis. Trans. v. 16, pref. p. 15-99. 1906)
 See also Acad. Sc. St. Louis (1856).
- WHIPPLE, A[ldon] B. The early botany of Berkshire. Pittsfield, Mass., 1889. (In Berkshire Hist. & Sc. Soc. Papers, 1889. p. 5-35)
 Historical sketch.
- WHITE, C[harles] A[biathar]. . . . Correlation papers: Cretaceous . . . Wash. Gov't print. office, 1891. 273 p. (In U. S. Geol. Surv. Bull no. 82)
 Historical sketch of the Cretaceous (North American), p. 61-72.
 Annotated bibliography, alphabetically by author, p. 26-60.

WHITE, C[harles] A[biathar], and NICHOLSON H[enry] Alleyne. . . . Bibliography of North American invertebrate palaeontology, being a report on the publications that have hitherto been made upon the invertebrate palaeontology of North America, including the West Indies and Greenland. Wash. 1878. 132 p. (In U. S. Geol. Surv. Territories. Misc. Pub. no. 10)

Pt. 1 Titles & abstracts of publications made in U. S., by C. A. White; p. 5-69.

2 Titles & abstracts made in British N. A., West Indies & Europe, by H. A. Nicholson, p. 71-132.

Annotated & arrangements alphabetic by authors.

Supplement pub. (In U. S. Geol. & Geogr. Surv. Territories. 1879-80. F. V. Hayden, Geologist in charge. Wash. 1880. Bull. v. 5, no. 1, art. 9, p. 143-52)

(1) WHITNEY, J[osiah] D[wight]. Geographical and geological surveys. (In North American Review. v. 121, p. 37-85, 270-314. July & Oct. 1875)

General essay on the methods, personnel, etc., of the geological and geographical surveys made in the U. S., with a history of the state surveys and the various exploring expeditions.

(2) ——— . . . List of American authors in geology and palaeontology. Cambridge, Mass., Library of Harvard Univ., 1882. 11 p. (In Harvard Univ. Library. Bibliog. Contrib. no. 15)

Repr. from Harvard Univ. Bull. no. 22-23. 1882. List is supplementary to PRIME (q.v.) & the ROYAL SOCIETY OF LONDON. Cat. Sc. Papers (q.v.), above.

WHITNEY, J[osiah] D[wight], and WADSWORTH, M[arshman] E[dward]. The Azoic system and its proposed sub-divisions. Cambridge, Mass., Aug. 1884. (In Mus. Comp. Zool. Bull. v. 7, (Geol. Ser. v. 1), no. 11, 16 + p. 331-565)

Rev. by J. D. DANA in Amer. J. Sc. ser. 3, v. 28, p. 313-14. Oct. 1884. Arranged geographically.

Cont. in "List of American publications between 1872 and 1889 that have some relation to the crystalline rocks of the Northwest." (In Minn. Geol. & Nat. Hist. Surv. 17th Ann. Rept. for 1888. St. Paul, 1889. p. 231-65)

WHITTLE, Charles Livy. Outline of the views previously held regarding the structure and age of the Green Mountains. (In Jour. Geol. v. 2, no. 4, p. 399-404. May-June, 1894)

WIDMANN, Otto. A preliminary catalog of the birds of Missouri . . . St. Louis, 1907. (In Acad. Sc. St. Louis. Trans. v. 17, p. 2-4)

History, p. 2-4. Rd. before Society, May 21, 1906.

WIGHT, O[rlando] W[illiams]. Brief history of previous geological surveys in Wisconsin. Madison, 1877. (In Wisconsin Geol. Surv. 1873-77. v. 2, p. 67-72)

See also WISCONSIN GEOL. SURV. (1853)

WILBERT, Martin Inventius. Some early botanical and early herb gardens. (In Amer. Jour. Pharmacy. v. 80, p. 412-27. Sept. 1908)

Gives historical sketches of many of the little known gardens of the earlier part of the nineteenth century.

- WILDER, Marshall Pinckney. The horticulture of Boston and vicinity. Boston, 1881. (In Winsor, Justin, ed. Memorial History of Boston. v. 4, ch. 12, p. 607-40)
 Contains considerable information concerning the public and private gardens of the city.
- WILLEY, H[enry]. American lichenography. Salem, Mass., July, 1868. (In Essex Inst. Proc. v. 5, p. 191-96)
 Historical account of the contributions to the study of American lichens, treated chronologically. Rd. before the Institute, Dec. 9, 1867.
- WILLIAMS, Henry Shaler. . . . Correlation papers: Devonian and Carboniferous. Wash. Gov't print. office, 1891. 279 p. (In U. S. Geol. Surv. Bull. no. 80)
 ch. 1: The history and development of opinions regarding the classification of rocks in the United States from the time of William Maclure to the completion of the Geological Survey of the state of New York: 1809-1843. p. 22-57.
 2: The general application of the nomenclature of the New York system as a standard of correlation in other parts of the U. S.: 1840-1851. p. 58-74.
 4: The coal measures or Pennsylvania series. p. 83-107.
 7: The lower Carboniferous or Mississippian series. p. 135-72.
 8: Waverly problem. p. 173-92.
 9: The Permian problem of Kansas and Nebraska: 1858-1886. p. 193-212.
- WILLIAMS, John Francis. General literature on the igneous rocks of Arkansas. Little Rock, 1891. (In Arkansas Geol. Surv. Ann. Rept. for 1890. v. 2, ch. 2, p. 7-18)
 Annotated historical treatment of the chief writers. See also ARKANSAS GEOL. SURV. (1857)
- WILLIS, Bailey. Index to the stratigraphy of North America, accompanied by a geologic map of North America, compiled by the United States Geological Survey in cooperation with the Geological Survey of Canada and the Instituto Geologico de Mexico under the supervision of Bailey Willis and George W. Stose. Wash. Gov't print. office, 1912. 894 p. map. (In U. S. Geol. Surv. Prof. Papers, 71)
 Bibliography, p. 840-65.
- WILLISTON, S[amuel] W[endell]. Bibliography of North American Diptero-logy, 1878-1895. Lawrence, Kansas, Jan. & April, 1896. (In Kansas Univ. Quart. v. 4, no. 3 & 4, p. 129-44, 199-204)
 Alphabetically by author.
- WILSON, H[enry] V[an Peters]. Zoology in America before the present period. (In Elisha Mitchell Sc. Soc. Jour. v. 28, p. 54-67. Aug. 1912)
 Presidential Address before the N. C. Acad. Sc. April 26, 1912. Summary of the work of the pioneers in American zoology.
- (1) WINCHELL, Alexander. Sketch of the history of geology in Michigan. Lansing, Mich., 1861. (In his First Biennial Rept. Geol. Surv. Michigan. p. 5-17)
 See also MICHIGAN GEOL. SURV. (1837).

- (2) ——— American opinion of the older rocks. Minneapolis, 1890.
(In Minn. Geol. & Nat. Hist. Surv. 18th Ann. Rept. for 1889. p. 65-225)
"A synopsis of the opinions of E. Emmons, E. Hitchcock, H. D. Rogers, Houghton, Logan, Hunt, Whitney, Matthew, etc."
Bibliography of the Taconic controversy, chronologically arranged, p. 83-6.
- WINCHELL, Horace V[auln]. Historical sketch of the discovery of mineral deposits in the Lake Superior Region. (In Minn. Geol. & Nat. Hist. Surv. 23rd Ann. Rept. 1894. p. 116-56)
p. 148-55, Bibliography. Read before Lake Superior Mining Inst. Mar. 7, 1894. Pub. in its Proc.
- (1) WINCHELL, Newton Horace. Historical sketch and list of publications relating to the geology and natural history of Minnesota. Minneapolis, 1873.
(In Minn. Geol. Surv. Ann. Rept. for 1872. p. 22-39)
2d ed. of the Rept. 1884.
See also Minnesota Geol. Surv. (1859)
- (2) ——— Geological notes from early explorers in the Minnesota Valley. (In Minn. Acad. Nat. Sc. Bull. v. 1, p. 89-101, 153-56. 1874-75)
- (3) ——— Bibliography of the mineralogy of Minnesota. (In Minn. Acad. Nat. Sc. Bull. v. 2, p. 390-97. Oct. 1882)
See also Minnesota Geol. Surv. (1859)
- (4) ——— Historical sketch of explorations and surveys in Minnesota. (In Minn. Geol. & Nat. Hist. Surv. Final Rept. 1884. v. 1, p. 1-110)
Extended review of the achievements of explorers and naturalists from colonial days to 1880.
See also Minnesota Geol. Surv. (1859)
- (5) ——— A sketch of geological investigations in Minnesota. (In Jour. of Geol. v. 2, no. 7, p. 692-707. Oct.-Nov. 1894)
See also Minnesota Geol. Surv. (1859)
- (6) ——— "The Monthly American Journal of Geology and Natural Science." (In Amer. Geol. v. 30, no. 1, p. 62-4. July, 1902)
Brief historical sketch. See MONTHLY AMER. JOUR. GEOL. & NAT. SC. 1831)
- (7) ——— Review of the formation of geological societies in the United States. (In Geol. Soc. Amer. Bull. v. 25, p. 27-30. Mar. 30, 1914)
- (8) ——— History of geological surveys in Minnesota. St. Paul, 1889. 37 p. (In Minn. Geol. & Nat. Hist. Surv. Bull. no. 1)
See MINNESOTA GEOL. SURV. (1859)
- (9) ——— Steps of progressive research in the geology of the Lake Superior Region prior to the late Wisconsin Survey. (In Amer. Geol. v. 16, p. 12-20. July, 1895)
- WINCHELL, N[ewton] H[orace], and ULRICH, E[dward] O[scar]. Historical sketch of investigation of the lower Silurian in the Upper Mississippi Valley.

Minneapolis, 1895. (In Minn. Geol. & Nat. Hist. Surv. Final Rept. Geol. v. 3, pt. 1, pref. p. 9-53)

Contains a bibliography chronologically arranged.

WINSHIP, George Parker. Travellers and explorers, 1583-1763. N. Y. G. P. Putnam, 1917. (In The Cambridge History of American Literature. v. 1, book 1, ch. 1, p. 1-13)

Historical sketch, with attention especially to the literary aspects. Accompanying bibliography, p. 365-80.

WINSLOW, Arthur. Geological surveys in Missouri. (In Jour. of Geol. v. 2, no. 2, p. 207-21. Feb.-Mar. 1894)

See also MISSOURI GEOL. SURV. (1853)

WINSLOW, Arthur and MARBUT, C[urtis] F[letcher]. The mapping of Missouri. (In Acad. Sc. St. Louis. Trans. v. 6, p. 57-99, map. Sept. 1892)

Ed. before Academy, May 16, 1892.

See also Missouri Geol. Surv. (1853)

WOODWARD, Anthony. The Bibliography of the Foraminifera recent and fossil, including Eozoon and Receptaculites, 1565-January 1, 1886. St. Paul, 1886. (In Minn. Geol. & Nat. Hist. Surv. 14th Ann. Rept. for 1885. pt. 6, p. 167-283)

Pt. 2, deals with North America, p. 189-200.

WYCKOFF, Edith. . . . Bibliography relating to the floras of North America and the West Indies, embracing botanical section R of the Lloyd Library. Cincinnati, 1913. (In Lloyd Library. Bibliog. Contrib. no. 9, p. 355-417)

Arranged alphabetically by authors.

YOUMANS, W[illiam] J[ay], ed. Pioneers of science in America: sketches of their lives and scientific work . . . N. Y. D. Appleton & Co., 1896. 8 + 508 p. illus. pl. port.

Repr. with additions from the Popular Sc. Monthly.

The 50 most prominent American scientists.

A CLASSIFIED SUBJECT INDEX TO THE ANNOTATED BIBLIOGRAPHY

BIBLIOGRAPHICAL NOTE

Where no catch-title occurs after a name, it indicates that the reference is general and not specific, and comprehends either the whole subject or an entire period.

ALGAE.

Bibliography:

INTERNAT. CAT. SC. LIT., 1901-date, (Current)

TILDEN, 1895

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Bibliography:

DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

VAN HISE, 1892

VAN HISE & LEITH, (1), 1909

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WILLIS, 1912, (Index to stratigraphy)

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VAN HISE, 1892

VAN HISE & LEITH, (1), 1909

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BARDEEN, 1905

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Bibliography:

FIELD, 1873, (N. A. Indians)

INTERN. CAT. SC. LIT., 1901-date, (Current)

SABIN, 1868, (Americana)

See also NATURAL HISTORY (GENERAL): Bibliography.

History:

HRDLIČKA, 1919. (Physical A.)

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AQUATIC LIFE.

Bibliography: see ZOOLOGY: Bibliography.

ICHTHYOLOGY: Bibliography.

History:

RATHBUN, (1), 1883

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ICHTHYOLOGY: History

ARACHNOLOGY, see ENTOMOLOGY.

ARBORICULTURE.

Bibliography:

REHDER, 1911, (Woody plants)

TUCKER, 1914, (Arnold Arboretum Library)

See also BOTANY: Bibliography & History.

ARCHAEOLOGY.

Bibliography:

DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

VAN HISE, 1892

VAN HISE & LEITH, (1), 1909

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WHITNEY & WADSWORTH, 1884, (Azoic System)

WILLIS, 1912, (Index to stratigraphy)

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VAN HISE, 1892

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BIRDS, see ORNITHOLOGY.

BOTANIC GARDENS.

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BRITTON, (1), 1896

BROWN, A., 1909, (Elgin Bot. Gard.)

DARLINGTON, 1849, (Bartram's & Marshall's)
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 FINCH, 1833
 GAGER, (1), 1912, (Linnaean Bot. Gard., L. I.)
 GAGER, (2), 1918, (Brooklyn Bot. Gardens)
 GOODE, (2), 1888
 HARRISON, 1913, (Transylvania Univ.)
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 WILBERT, 1908
 WILDER, 1881, (Boston Gardens)

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Bibliography:

ALLISON, 1908, (Colo.)
 BARNHART, (1), 1915, (Torrey Club Range Floras)
 BARNHART, (4), 1907, (Vt. Floras)
 BAY, 1909, (Bibliography)
 BLANKINSHIP, 1905, (Montana)
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 BRITISH MUS. NAT. HIST., 1903
 BRITTON, (2), 1890, (State & Local Floras)
 CALKINS, 1896, (Lichenology)
 CHRISTENSEN, 1906, (Index Filicum)
 CLARK, J. A., (2), 1902, (Books in Library Dept. Agric.)

 DAY, (1), 1899, (New England Floras)
 FARLOW & TRELEASE, 1887, (N. A. Fungi)
 FARLOW, 1905, (Index Fungi)
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 HOUSE, 1916, (N. Y.)
 INTERN. CAT. SC. LIT., 1901-date, (Current)
 JACKSON, B. D., (1), 1881
 JACKSON, B. D., (2), (Index Kewensis-Flowering Plants)
 JAMES, 1881, (Cincinnati)
 KELLERMAN, 1893, (Ohio)
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 REHDER, 1911, (Woody plants)
 STANDLEY, 1910, (New Mexico)
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UNDERWOOD, (2), 1894, (Indiana)
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BARNHART, (2), 1909
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 RYDBERG, (2), 1907, (Linnaeus & Amer. Bot.)
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 SCRIBNER, 1893, (Southern)
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 SMALL, 1917, (S. C.—by BARNHART)
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 WEATHERBY, 1904, (Conn.—old time)

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ALLISON, 1908, (Colo.)
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 COVILLE, 1902, (D. C.)

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- DARLINGTON, 1849
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 DUDLEY, 1886, (Cayuga Co., N. Y.)
 FINK, 1904, (N. A. Lichenology)
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 GOODE, (1), 1886,
 GOODE, (2), 1888
 GRAVES, 1910, (Conn.)
 GRAY, Asa, (1), 1841, (Southern Alleghanies)
 GRAY, Asa, (2), 1843, (Correspondence of Colden)
 GRAY, Asa, (3), 1883, (N. A. Flora)
 HARSHBERGER, (1), 1889, (Phila.)
 HARSHBERGER, (2), 1900, (Plants named after Phila. Botanists)
 HEMENWAY, 1904, (Oregon country)
 HOOKER, 1825
 HOSACK, (3), 1814, (Lectures in Columbia College)
 HUMPHREY, 1896, (New England)

 KELLERMAN & WERNER, 1893, (Ohio)
 MC ATEE, 1918, (D. C.)
 MITCHILL, 1814, (Colonial & U. S.)
 MOHR, 1901, (Alabama)
 PEASE, 1917, (White Mts.)
 PEIRCE, 1911,
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 PIPER, 1906, (Wash. State)
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 RICKER, 1918, (D. C.)
 ROBINSON, (2), 1884, (Essex Co., Mass.)
 RUSBY, 1907, (N. Y. City)
 RYDBERG, (1), 1907, (Scandinavians)

 SAUL, 1907, (Tree Culture in D. C.)
 SHEAR & STEVENS, 1921, (Corres. Schweinitz & Torrey)
 SHORT, 1836, (West of Alleghanies)
 SPAULDING, 1908, (St. Louis)
 STRONG, 1880, (Horticulture)
 TORREY, 1843, (N. Y. State)
 TRELEASE, (1), 1901, (19th century)
 TRUE, (1), 1916, (Jefferson & Amer. Bot.)
 TRUE, (2), 1920, (Beginnings Agric. Lit. in U. S.)
 TUCKERMAN, 1860, (Colonial)
 UNDERWOOD, (4), 1907, (N. A. Flora)
 UNDERWOOD, (6), 1900
 VASEY, 1886, (U. S. Nat. Herbarium)
 WHIPPLE, 1889, (Berkshire Co., Mass.)
 WILDER, 1881, (Boston & Mass.)

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HERBARIA: History.

NATURAL HISTORY (GENERAL): History.

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BRYOLOGY, see MOSSES.

CAMBRIAN.

Bibliography:

DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

VOGDES, (1), 1893, (Crustacea)

WALCOTT, (2), 1891

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WILLIS, 1912, (Index to stratigraphy)

See also GEOLOGY, PALAEONTOLOGY, PALAEOZOIC & TACONIC SYSTEM: Bibliography.

History:

HUNT, (1), 1883, (Taconic System)

HUNT, (3), 1878, (Pre-Silurian Rocks)

WALCOTT, (2), 1891

See also GEOLOGY, PALAEONTOLOGY, & TACONIC SYSTEM: History.

CARBONIFEROUS (LOWER & UPPER)

Bibliography:

DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, (2), (3), (4), 1902-6, (For 1892-1905)

WELLER, 1898, (Invertebrates N. A.)

WILLIAMS, 1891

WILLIS, 1912, (Index to stratigraphy)

See also GEOLOGY, PALAEONTOLOGY, PALAEOZOIC: Bibliography.

History:

WILLIAMS, 1891

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CENOZOIC.

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CLARK & TWITCHELL, 1915, (Bib. Echinodermata)

MILLER, S. A., (2), 1879, (Literature)

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GEOLOGY: " "

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COLLECTORS & COLLECTIONS.

For the Biography and History of collectors and collections of a particular branch of Natural History, consult the name of that branch, sub-head Biography or History; *e.g.*, Botanical collections or collectors, BOTANY: History; Biography.

COLONIAL TIMES.

Biography, Bibliography & History.

BARNHART, (2), 1909, (Botanists)

COLONIAL TIMES (cont.)

- BRENDDEL, 1879, (Hist. Botany)
 CHANNING, 1821, (Hist. Botany)
 COLTON, 1909, (Peale's Mus., Phila.)
 COOPER, 1917, (Explorers: 1763-1846)
 DARTON, 1896, (Bib. Geol., Pal., Miner.)
 DEAN & EASTMAN, 1916, (Bib. Fishes)
 EVANS, 1903, (Amer. Bibliography, 1639-1820)
 FOX, 1919, (Dr. Fothergill & Amer. Botanists)
 GAGER, (1), 1912, (Linnaean Bot. Gard., L. I.)
 GOODE, (1), 1886, (Beginnings Amer. Nat. Hist.)
 GRAY, Asa, (2), 1843, (Correspondence of Colden)
 HARSHBERGER, 1899, (1), (Phila. Botanists)
 KELLY, 1914, (Amer. Medical Botanists)
 KLEM, 1914, (Hist. Sc. St. Louis)
 KOHL, 1885, (Hist. Discovery Coasts U. S.)

 LUCAS, 1908, (Linnaeus & Amer. Nat. Hist.)
 MARCOU & MARCOU, 1884, (Geol. Maps)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MITCHILL, 1814, (Hist. Botany)
 PACKARD, 1876, (Hist. Zoology)
 REA, (2), 1915, (Hist. Charleston Mus.)
 RYDBERG, (1), 1907, (Scandinavians & Amer. Bot.)
 RYDBERG, (2), 1907, (Linnaeus & Amer. Bot.)
 SABIN, 1868, (Bib. Books U. S.)
 SPAULDING, 1909, (Hist. Botany St. Louis)
 THWAITES, (2), 1904, (Early western travels)
 TUCKERMAN, 1860, (Hist. Botany)
 WHEELER, 1889, (Hist. Explorations western U. S.)
 WINCHELL, N. H., (4), 1884, (Hist. Explor. Minnesota)
 WINSHIP, 1917, (Explorers: 1583-1763)
 YOUMANS, 1896, (Biog. Amer. Scientists)

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Bibliography:

- AGASSIZ & STRICKLAND, 1848, (Universal)
 BAKER, F. C., 1911, (Lymnaeidae)
 BAKER, F. C., (2), 1910, (Illinois)
 BINNEY, W. G., 1863
 CATLOW & REEVE, 1845, (Nomenclator)
 GRAY, 1883, (Ohio)
 HENDERSON, 1907, (Colo.)
 LETSON, 1905, (N. Y.)
 MAZYCK, 1913, (S. C.)
 TRYON, (1), 1861

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- DALL, (1), 1888

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- BINNEY, Amos, (2), 1851

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Bibliography:

BERRY, (2), 1911, (Lower C. of Md.)

CLARK, (3), 1916, (Upper C. of Md.)

DARTON, (1), 1896, (For 1732-1891)

KNOWLTON, 1898, (C. Plants N. A.)

MILLER, S. A., (2), 1879, (Literature)

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WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

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ADAMS, 1898, (Upper C. of Kansas)

BERRY, (1), 1911, (Flora Baritan Formation)

BERRY, (2), 1911, (Lower C. of Md.)

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MILLER, S. A., (2), 1879, (Literature)

WHITE, 1891, (N. A.)

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VOGDEN, 1903, (Fossil)

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Bibliography:

REHDER, 1911, (Woody plants)

TUCKER, 1914, (Cat. Arnold Arboretum Library)

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DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

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WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

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MINOT, 1893, (Vertebrate)

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Bibliography:

AGASSIZ & STRICKLAND, 1848, (Universal)

ALDRICH, 1905, (Diptera)

BANKS, 1900

BEUTENMULLER, 1891, (N. A. Coleoptera Transform.)

BRITISH MUS. NAT. HIST., 1903

CLARK, J. A., (1), 1906, (In U. S. Dept. Agric. Library)

CRESSON, (2), 1887, (N. A. Hymenoptera)

DYAR, 1902, (N. A. Lepidoptera)

EDWARDS, 1889, (Transformations Lepidoptera)

HAGEN, 1862

HAMILTON & HENSHAW, 1891, (N. A. Coleoptera)

HENSHAW, 1890-1905, (Economic)

INTERNATIONAL CAT. SC. LIT., 1901-date (1900-date)

SCHWARZ, (2), 1888, (N. A. Insects)

SCUDDER, (4), 1901, (Orthoptera)

SCUDDER, (3), 1890, (Fossil Insects)

SCUDDER, (7), 1868, (Orthoptera)

UNDERWOOD, (1), 1893, (Myriapoda)

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GOODE, (2), 1888

GRAEF, 1914, (Brooklyn, N. Y.)

GRINNELL, F., 1914, (California)

LINTNER, 1878

MORRIS, 1846

MORSE, A. P., 1920, (New England Orthoptera)

SCHWARZ, (1), 1890

SCUDDER, (2), 1880, (Libraries)

SCUDDER, (8), 1875, (Butterflies)

SKINNER, 1911

SMITH, J. B., 1910

UNDERWOOD, (5), 1887, (Arachnology)

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Bibliography:

CLARK, (2), 1891, (U. S.)

CLARK & MARTIN, 1901, (Md.)

DALL, (3), 1909, (Mollusca N. W. America)

DARTON, (1), 1896, (For 1732-1891)

MILLER, S. A., (2), 1879, (Literature)

NICKLES, 1909-date, (For 1908-date)

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WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WILLIS, 1912, (Index to stratigraphy)

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MORSE, E. S., (2), 1877, (U. S.)

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Bibliography:

BRITISH MUS. NAT. HIST., 1903

COOPER, 1917, (Explorers: 1763-1846)

COUES, (3), 1876, (Lewis & Clark Exped.)

COUES, (4), 1895, (Pike's Exped.)

DARTON, (1), 1896

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BAIRD, 1855, (Of the Fifties)

BAKER, M., 1900, (Northwest Bdry. Surv.)

BARNHART, (5), 1919, (Bot. Wilkes Exped.)

BENT, (2), 1915, (U. S. Mountains)

BLANKINSHIP, 1905, (Montana)

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BRENDEL, 1879, (Botanical)

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 COLLINS, F. S., 1912 (Wilkes Exped.)
 COOPER, 1917, (Explorers: 1763-1846)

DARTON, (2), 1920
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 EMMONS, 1897
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 FREMONT, 1887, (Western States)
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 HAYDEN, 1862
 HILL, 1887, (Texas)
 JEPSON, 1893, (California)
 KLOTZ, 1917, (Northwest Bdry. Surv.)
 KOHL, 1885

LESLEY, 1876, (Pennsylvania)
 MERRILL, G. P., (1), 1906
 NEWTON, 1880, (Upper Missouri)
 NOURSE, 1884, (Arctic & Antarctic)
 O'HARRA, (2), 1900, (Black Hills, S. D.)
 PIPER, 1906, (Bot. in Wash. State)
 SPAULDING, 1908, (St. Louis, Botanical)
 THWAITES, (1), 1904, (Rocky Mts.)
 THWAITES, (2), 1904, (Early western)
 TODD, 1894, (South Dakota)
 UPHAM, (1), 1874, (White Mts.)
 UPHAM, (2), 1914, (Minn. & Red Rivers)
 WARREN, G. K., 1859, (U. S. to 1857)
 WHEELER, 1889, (U. S. to 1880)
 WHITNEY, (1), 1876
 WINCHELL, N. H., (2), 1874, (Minnesota)
 WINCHELL, N. H., (4), 1884, (Minnesota)
 WINSHIP, 1917, (Explorers: 1583-1763)

EXPLORERS.

For the collective Biography of Explorers, see NATURAL HISTORY (GENERAL): Biography; or, the name of a special branch of natural history, sub-head Biography or History, as GEOLOGY: History; Biography.
 For the Biography of individual explorers, consult the special BIBLIOGRAPHY OF BIOGRAPHIES, following the Geographic Index.
 See also EXPLORATIONS: History.

FERNS.

Bibliography:
 CHRISTENSEN, 1906, (Index Filicum)
 See also BOTANY: Bibliography & History.

FISHES, see ICHTHYOLOGY.

FLORAS, see BOTANY: Bibliography & History.

FOOT-MARKS, FOSSIL, see ICHNOLOGY.

FORAMINIFERA.

Bibliography:
 SHERBORN, 1893, (Index)

WOODWARD, 1886

See also ZOOLOGY: Bibliography.

PALAEONTOLOGY: Bibliography.

History:

See also ZOOLOGY: History.

PALAEONTOLOGY: History.

FORESTRY.

Bibliography:

HAWKS, 1912, (Pub. in Library Dept. Agric.)

REHDER, 1911, (Woody Plants)

TUCKER, 1914, (Arnold Arboretum Library Cat.)

See also BOTANY: Bibliography & History.

FORMATION NAMES (GEOLOGICAL & PALEONTOLOGICAL), see NOMENCLATURE (G & P); ARCHAEOAN; ALGONKIAN; CAMBRIAN; CENOZOIC; CARBONIFEROUS; CRETACEOUS; DEVONIAN; EOCENE; MESOZOIC; MIOCENE; NEOCENE; NEWARK SYSTEM; PALAEOZOIC; PERMIAN; PLEISTOCENE; PLIOCENE; QUATERNARY; SILURIAN; TERTIARY.

FOSSIL INSECTS, see ENTOMOLOGY.

FUNGI.

Bibliography:

FARLOW, 1905, (Index)

FARLOW & TRELEASE, 1887

INTERN. CAT. SC. LIT., 1901-date, (Current)

LINDAU & SYDOW, 1908, (Fungi & Lichens)

WATSON, Sereno, 1878

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GEOLOGICAL MAPS, see MAPS (GEOLOGICAL)

GEOLOGICAL SURVEYS (State), see SURVEYS, GEOLOGICAL (State)

GEOLOGICAL SURVEYS (U. S.), see EXPLORATIONS.

GEOLOGY.

Bibliography:

AGASSIZ & STRICKLAND, 1848, (Universal)

ALDEN, 1918, (Quaternary S. E. Wis.)

BABB, 1913, (Me.)

BARBOUR & FISHER, 1902, (Neb.)

BAYLEY, 1904, (Michigan Iron District)

BENT, (1), 1911, (White Mts.)

BERRY, (2), 1911, (Cretaceous, Lower, of Md.)

BLACK, 1916, (N. J.)

BOVEE, 1918, (Wyo.)

BRANNER, (2), 1909, (Ark.)

BRITISH MUS. NAT. HIST., 1903

BROWN, S. B., 1901, (W. Va.)

CLARK, (2), 1891, (Eocene)

GEOLOGY.

Bibliography (cont.)

- CLARK, (4), 1916, (Upper Cretaceous, Md.)
 CLARK & MARTIN, 1901, (Eocene Maryland)
 CLARK & MILLER, 1912, (Va. Coastal Plain)
 CLARKE, J. M., (2), 1894, (N. Y.)
 COCKRILL, 1911, (Tenn.)
 DALE, 1894, (Mt. Greylock)
 DALL & HARRIS, 1892, (Neocene)
 DARTON, (1), 1896, (U. S. 1732-1891)
 DERBY & PROSSER, 1906, (Ohio)
 ELLIS, 1903, (N. Y. State)
 FULLER, 1914, (Long Island)
 GIBARD, 1852, (For 1851)
 GREGORY, (2), 1907, (Conn.)
 GREGORY, Win., 1915, (Minn.)
 HASSE, (2), 1907-20, (State Documents)
 HAY, R., 1896, (Kan.)
 HOVEY & CALL, 1913, (Mammoth Cave, Ky.)
- INTERN. CAT. SC. LIT., 1901-date, (Current)
 IRVING, (1), 1892, (Penokee Iron District)
 IRVING, (2), 1883, (Lake Superior Dist.)
 JONES, 1914, (Colo.)
 KEYES, (1), 1893, (Iowa)
 KEYES, (2), 1913, (Iowa)
 LANEY & WOOD, 1909, (N. C.)
 LUTRELL, 1915, (Ariz.)
 MARGERIE, 1896, (Bibliography)
 MARTIN, G. C., 1902, (Garret Co., Md.)
 MARTIN, L., 1916, (Wisconsin)
 MATHEWS, (1), 1897, (Md.)
 MILLER, B. L., 1911, (St. George's Co., Md.)
 NICKLES, 1909, (U. S. 1908-date)
 O'DONNELL, 1913, (Wash.)
 O'HARRA, (1), & (3), 1900 & 1917, (Black Hills)
 O'HARRA, (4), 1900, (Alleghany Co., Md.)
- PERKINS, (2), 1904, (Vt.)
 PROSSER, (2), 1913, (Lower Devonian, Md.)
 PROVIDENCE FRANKLIN SOC., 1887, (R. I.)
 RUSSELL, 1892, (Newark System)
 SAMPSON, 1890, (Mo.)
 SELLARDS, (1), 1907, (Fla.)
 SHATTUCK, (1), 1902, (Cecil Co., Md.)
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 SHATTUCK, (4), 1907, (Calvert Co., Md.)
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 STOCKBRIDGE, 1911, (White Mts. & Appalachians)
 TROUT & MYERS, 1915, (Okla.)
 VAN HISE, 1892, (Archæan & Algonkian)
 VAN HISE & LEITH, (1), 1909, (Pre-Cambrian)
 VAN HISE & LEITH, (2), 1911, (Lake Superior Region)
 VOGDES, (2), 1905, (Cal.)
 VOGDES, (4), 1903, (Cal.)

WADSWORTH, 1880, (Lake Superior Dist.)
 WALCOTT, (2), 1891, (Cambrian)
 WARMAN, 1880, 1893, 1901-1903, (U. S. Geol. Surv.)
 WATSON, T. L., 1897, (Va.)
 WEEKS, F. B., (2), & (3), 1902, (U. S. 1892-1900)
 WEEKS, F. B., (4), 1906, (U. S. 1901-1905)
 WHITE, 1891, (Cretaceous)
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 WILLIAMS, H. S., 1891, (Devonian & Carboniferous)
 WILLIAMS, J. F., 1891, (Igneous Rocks, Arkansas)
 WINCHELL, A., (2), 1890, (Taconic System)
 WINCHELL, N. H., (1), 1873, (Minn.)

See also NATURAL HISTORY: Bibliography.

MAPS (GEOLOGICAL): Bibliography.

Biography:

MERRILL, G. P., (U. S.), 1906
 MILLER, (1), 1882
 VOGDES, (3), (Cal.-Trask.), 1907

See also NATURAL HISTORY: Biography.

History:

ADAMS, 1898, (Upper Cretaceous, Kansas)
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 BLATCHLEY, 1917, (Indiana)
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 CLARK, (1), 1898, (Maryland)
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 CLARK & MATHEWS, 1906, (Maryland)
 CLARKE, (3), 1921, (N. Y. & General)
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DALE, 1894, (Mt. Greylock)
 DALL & HARRIS, 1892, (Neocene)
 DANA, J. D., (1), 1856
 DANA, J. D., (2), 1886, (Berkshire Co., Mass.)
 DANA, J. D., (3), 1886, (Taconic System)
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 FAIRCHILD, (2), 1898, (Glacial)
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 GOODE, (1), 1886
 GOODE, (2), 1888
 GREGORY, H. E., (1), 1918, (Land forms)

HALL, James, 1878, (Hudson River Group)
 HARRIS & VEATCH, 1899, (La.)
 HAWORTH & BENNETT, 1908, (Kansas)
 HAY & THOMPSON, 1887, (Kansas)

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History (cont.)

- HAYES, 1911, (State Surv.)
 HILL, 1887, (Texas)
 HITCHCOCK, C. H., (2), 1896, (N. H.)
 HITCHCOCK, C. H., (4), 1877, (White Mts.)
 HITCHCOCK, Ed., (1), 1841
 HITCHCOCK, Ed., (4), 1857
 HUNT, (1), 1883, (Taconic System)
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 HUNT, (3), 1878, (Pre-Silurian)
 IRVING, (2), 1883, (Lake Superior Dist.)
 LANE, 1904, (Mich.)
 LESLEY, 1876, (Pa.)
 LEVERETT & TAYLOR, 1915, (Pleistocene, Ind. & Mich.)

 MC DANIEL, 1884, (Essex Co., Mass.)
 MARCOU, Jules, (1), 1884, (Taconic System)
 MARTIN, G. C., 1902, (Garret Co., Md.)
 MERRILL, G. P., 1906, (U. S.)
 MERRILL, G. P., (2), 1920, (State Surv.)
 MILLER, B. L., 1911, (Prince George's Co., Md.)
 MILLER, S. A., (2), 1879, (N. A.)
 NEWBERRY, 1873, (Ohio)
 O'HARRA, (4), 1900, (Alleghany Co., Md.)
 PROSSER, (1), 1905, (Stratigraphic Geol.)
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 ROGERS, 1844
 RUSSELL, 1892, (Newark System)

 SCHUCHERT, (1), 1918, (Historical Geol.)
 SELLARDS, (2), 1908, (Fla.)
 SHATTUCK, (1), 1902, (Cecil Co., Md.)
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 SHATTUCK, (3), 1906, (Pliocene & Pleistocene, Md.)
 SHATTUCK, (4), 1907, (Calvert Co., Md.)
 SHATTUCK, (5), 1907, (St. Mary's Co., Md.)
 SILLIMAN, (1), 1842
 SMITH, E. A., (2), 1914, (Gulf coast)
 SMITH, G. O., 1918, (U. S. Geol. Surv.)
 STONE, 1908, (Pa.)
 VAN HISE, 1892, (Archaean & Algonkian)
 VAN HISE & LEITH, (1), 1909, (Pre-Cambrian)
 VAN HISE & LEITH, (2), 1911, (Lake Superior Region)

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 WALCOTT, (1), 1888, (Taconic System)
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 WHITNEY & WADSWORTH, 1884, (Azoic System)
 WHITTLE, 1894, (Green Mountains)
 WILLIAMS, 1891, (Devonian & Carboniferous)
 WILLIS, 1912, (Index N. A. Stratigraphy)
 WINCHELL, A., (1), 1861, (Mich.)
 WINCHELL, A., (2), 1890, (Opinions of Older Rocks)

- WINCHELL, N. H., (1), 1873, (Minn.)
 WINCHELL, N. H., (2), 1874, (Minn.)
 WINCHELL, N. H., (5), 1894, (Minn.)
 WINCHELL, N. H., (9), 1895, (Lake Superior)
 WINCHELL, N. H., & ULRICH, 1896, (Lower Silurian Upper Mississippi Valley)

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HERBARIA.

Bibliography: See also BOTANY: Bibliography.
 History:
 BLANKINSHIP, 1905, (Montana)
 DAY, (2), 1901, (New England)
 VASEY, 1886, (U. S. Nat. Herbarium)
 WEATHERBY, 1904, (Conn. old-time)

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HISTORY OF NATURAL HISTORY, see NATURAL HISTORY (GENERAL):

History; or, the name of a particular branch of Natural History, sub-head, History,
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HOBTICULTURE.

Bibliography:
 BAILEY, 1915
 REHDER, 1911, (Woody plants, etc.)
 TUCKER, 1914, (Arnold Arboretum Library Cat.)

See also BOTANY: Bibliography.

Biography:
 BAILEY, 1915

See also BOTANY: Biography.

History:

 BAILEY, 1915
 BARRON, 1916, (Garden writings)
 SAUL, 1907, (Tree culture in D. C.)
 STRONG, 1880, (Mass. Hort. Soc.)
 WILDER, 1881, (Boston)

See also BOTANY: History.

HYMENOPTERA.

Bibliography & History:
 See ENTOMOLOGY: Bibliography & History.

ICHTHOLOGY.

Bibliography:
 HITCHCOCK, Ed., (3), 1858, (Conn. Valley)

See also PALAEONTOLOGY: Bibliography.

History:

MERRILL, G. P., (1), 1906

See also PALAEONTOLOGY: History.

ICHTHYOLOGY.

Bibliography:

AGASSIZ & STRICKLAND, 1848, (Universal)

BRITISH MUS. NAT. HIST., 1903

CARUS, 1861, (For 1846-60)

DEAN & EASTMAN, 1916, (Universal)

EIGENMANN, 1894, (Indiana)

GILL, (2), 1873, (East Coast)

GILL, (3), 1882, (Pacific Coast)

INTERN. CAT. SC. LIT., 1901-date, (Current)

JORDAN, (7), 1882, (Ohio)

KENDALL, 1914, (Me.)

MARSHALL, 1873, (Nomenclature)

MULDER, 1874, (Universal)

SCUDDER, (6), 1882, (Nomenclature)

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History:

CLINTON, 1815

DE KAY, (2), 1842, (N. Y. & U. S.)

GILL, (1), 1904, (Mass.)

GOODE, (2), 1888

JORDAN, (2), 1919

JORDAN, (3), 1902

JORDAN, (4), (5), (6), 1917-19, (Nomenclature)

JORDAN, (8), 1905

MERRILL, G. P., (1), 1906

RATHBUN, (1), 1883

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INSECTS, see ENTOMOLOGY.

INSECTS (FOSSIL), see PALAEONTOLOGY.

JOURNALS, (SCIENTIFIC)

Bibliography:

AGASSIZ & STRICKLAND, 1848, (Geol. & Zool.)

BOLTON, (1), 1897, (Universal)

BRITISH MUS. NAT. HIST., 1903, (In its Library)

ROYAL SOC. LONDON, 1867-date, (Universal)

SCUDDER, (1), (Society organs)

SMITHSONIAN INST., 1866, (In its Library)

See also SERIALS, (SCIENTIFIC): Bibliography.

SOCIETIES, (SCIENTIFIC): Bibliography.

JOURNALS, SCIENTIFIC.

History:

BENTHAM, 1867

- CENTURY, 1918, (Amer. J. Sc.)
 COE, 1918, (Zool.)
 DANA, E. S., 1918, (Amer. J. Sc.)
 FEATHERSTONHAUGH, 1832
 GOODE, (2), 1888
 MERRILL, G. P., (1), 1916, (Geol.)
 WINCHELL, N. H., (6), 1902, (Monthly Amer. Jour. Geol. & Nat. Sc.)
 See also SERIALS, (SCIENTIFIC): History.
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- Bibliography & History:
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LIBRARIES (SCIENTIFIC).

- Bibliography:
 BRITISH MUS. NAT. HIST., 1903
 SMITHSONIAN INST., 1866, (Society pub.)
 TUCKER, 1914, (Arnold Arboretum)
 History:
 GOODE, (7), 1897, (Smith. Inst.)
 JEWETT, 1850, (Museum Coll. in Amer. Libr.)
 SCUDDER, (2), 1880, (Entomological)

LICHENOLOGY or LICHENOGRAPHY.

- Bibliography:
 CALKINS, 1896
 LINDAU & SYDOW, 1908, (Fungi & Lichens)
 See BOTANY: Bibliography & History.
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 History:
 BRENDDEL, 1879
 FINK, 1904
 WILLEY, 1868
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MAMMOLOGY.

- Bibliography:
 AGASSIZ, (1), 1842, (Nomenclature)
 AGASSIZ & STRICKLAND, 1843, (Universal)
 CARUS & ENGELMANN, 1861, (Universal, 1846-60)
 EVERMANN & BUTLER, 1894, (Indiana)
 GILL & COUES, 1877, (U. S. & N. A.)
 INTERN. CAT. SC. LIT., 1901-date, (Current)
 MARSCHALL, 1873, (Nomenclature)
 PALMER, (2), 1904, (Index Mammalia)
 SCUDDER, (6), 1882, (Nomenclature)
 TROUESSART, 1897, (Catalogus Mammalium)
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History:

ALLEN, 1891, (Since 1853)

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MAPS (GEOLOGICAL)

Bibliography:

LEIGHTON, 1909, (N. Y. State)

MARCOU & MARCOU, 1884, (N. A. & S. A.)

MATHEWS, (1), 1897, (Md.)

See also GEOLOGY: Bibliography.

PALAEONTOLOGY: Bibliography.

History:

HITCHCOCK, C. H., (3), 1887

BROWN, S. B., 1901, (W. Va.)

LEIGHTON, 1909, (N. Y. State)

MATHEWS, (2), 1898, (Md.)

MERRILL, G. P., (1), 1906

WINSLOW & MARBUT, 1892, (Mo.)

See also GEOLOGY: History.

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MESOZOIC.

Bibliography & History:

BOYLE, 1893, (Bib. Invertebrata)

CLARK & TWITCHELL, 1915, (Bib. Echinodermata)

MILLER, S. A., (2), 1879, (Literature)

See also CRETACEOUS (LOWER & UPPER): Bibliography & History.

GEOLOGY: Bibliography & History.

NEWARK SYSTEM: Bibliography & History.

PALAEONTOLOGY: Bibliography & History.

MICROSCOPY, see ZOOLOGY, BOTANY, NATURAL HISTORY (GENERAL)

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Bibliography:

BLACK, 1916, (N. J.)

BOVEE, 1918, (Wyo.)

BRITISH MUS. NAT. HIST., 1903

BROWN, S. L., 1901, (W. Va.)

COCKRILL, 1911, (Tenn.)

DARTON, (1), 1896, (U. S.)

DERBY & PROSSER, 1906, (Ohio)

ELLIS, 1903, (N. Y. State)

GORDON, 1922, (Pa.)

GREGORY, Win., 1915, (Minn.)

INTERNATIONAL CAT. SC. LIT., (Current)

JONES, 1914, (Colo.)

KEYES, (1), 1893, (Iowa)

KEYES, (2), 1913, (Iowa)

LANEY & WOOD, 1909, (N. C.)

LUTRELL, 1915, (Ariz.)

MATHEWS, 1898, (Maryland)

NICKLES, 1909, (U. S.—1908—date)

O'DONNELL, 1913, (Wash. State)

O'HARRA, (3), 1917, (Black Hills, S. D.)
 PROVIDENCE FRANKLIN SOCIETY, 1887, (R. I.)
 TROUT & MYERS, 1915, (Okla.)
 TRUBNER, 1859
 VOGDES, (2), 1905, (Cal.)
 VOGDES, (4), 1903, (Cal.)
 WATSON, T. L., 1897, (Va.)
 WEEKS, F. B., (2), & (3), 1902, (U. S. 1892-1900)
 WEEKS, F. B., (4), 1906, (U. S. 1901-1905)
 WEEKS, F. B., & NICKLES, 1909, (U. S. 1906-1907)
 WINCHELL, N. H., (3), 1882, (Minn.)

See also NATURAL HISTORY: Bibliography.

Biography:

GOODE, (2), 1888
 MERRILL, G. P., (1), 1906

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History:

BECK, 1842, (N. Y. State)
 BRUSH, 1883
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 FORD, 1918
 GOODE, (1), 1886
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 MCDANIEL, 1884, (Essex Co., Mass.)
 MERRILL, G. P., (1), 1906
 PENFIELD, 1901, (At Yale Univ.)
 RAFINESQUE, 1817
 WINCHELL, H. V., 1894, (Lake Superior)

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NATURAL HISTORY (GENERAL): History.

MIOCENE.

Bibliography:

DARTON, (1), 1896, (For 1732-1891)
 MILLER, S. A., (2), 1879, (Literature)
 NICKLES, 1909-date, (For 1908-date)
 SHATTUCK, (2), 1904, (Md.)
 WEEKS, F. B., (1), 1902, (Formation names)
 WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)
 WILLIS, 1912, (Index to stratigraphy)

See also CENOZOIC & TERTIARY: Bibliography.

History:

MILLER, S. A., (2), 1879, (Literature)
 SHATTUCK, (2), 1904, (Md.)

See also CENOZOIC & TERTIARY: History.

MISSISSIPPIAN, see CARBONIFEROUS (LOWER).

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MOSESSES.

Bibliography:

INTERNATIONAL CAT. SC. LIT., 1901-date

PARIS, 1894, (Index Bryologicus)

UNDERWOOD, (3), 1893, (Index Hepaticarum)

See also BOTANY: Bibliography & History.

MUSEUMS.

Bibliography:

ELLIS, 1903, (N. Y. State Mus.)

MERRILL, F. J. H., (3), 1903, (Directory)

MURRAY, 1904

REA, (1), 1910, (Directory)

ROYAL SOC. LONDON, 1867

See also NATURAL HISTORY (GENERAL): Bibliography.

ZOOLOGY: Bibliography.

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BOTANY: Bibliography.

History:

AGASSIZ, A., 1902, (Mus. Comp. Zool.)

BENTHAM, 1867

BRAGG, (3), 1923, (Charleston Mus.)

COLTON, 1909, (Peale's Mus., Phila.)

CROOK, 1908, (Illinois State)

FARRINGTON, 1915

FAXON, 1915, (Peale's)

FINCH, 1833

GOODE, (2), 1888

GOODE, (3), 1889

GOODE, (4), 1890

GOODE, (6), 1892, (U. S. Nat. Mus.)

GOODE, (7), 1897, (Smith. Inst.)

HALL, J., (3), 1883, (N. Y. State)

JEWETT, 1850

JOHNSTON, 1877, (Wesleyan Univ.)

MERRILL, F. J. H., (1), (N. Y. State)

MERRILL, F. J. H., (3), (Directory)

MERRILL, G. P., (2), 1920, (N. Y. State Mus.)

RATHBUN, (3), 1905, (U. S. Nat. Mus.)

REA, (1), 1910, (Directory)

REA, (2), 1915, (Charleston Mus.)

STONE, W., (2), 1899, (Peale's)

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ZOOLOGY: History.

GEOLOGY: History.

BOTANY: History.

MYCOLOGY, see FUNGI.

NATURAL HISTORY (GENERAL)

Bibliography:

BRITISH MUS. NAT. HIST., 1903

EVANS, 1903, (Amer. Bibliography: 1639-1820)

INTERNATIONAL CAT. SC. LIT., 1901-date, (Current)

JOHN CRERAR LIBRARY, 1902, (In its Collection)

JOSEPHSON, 1911, (In John Crerar Library)

ROYAL SOC. LONDON, 1867, (Universal)

SABIN, 1868, (Americana)
 TRUBNER, 1859
 TUCKER, 1914, (Arnold Arboretum Library)

For the Bibliography of the special fields in Natural History, consult the name of the particular branch, sub-head Bibliography, as GEOLOGY: Bibliography.

NATURAL HISTORY (GENERAL).

Biography:

AMER. MUS. NAT. HIST., 1907, (Pioneers Sc.)
 BENJAMIN, (1), 1899, (Amer. Assoc. Adv. Sc.)
 CARNEGIE LIBRARY PITTSBURGH, 1905, (Scientists, etc.)
 DERBY, G., 1906, (In Nat. Cycl. Amer. Biog.)
 GOODE, (1), 1886
 GOODE, (2), 1888
 HARSHBERGER, (1), 1899, (Botanists Phila.)
 HERRICK, F. H., 1917, (Audubon)
 JORDAN, (1), 1910, (Pioneers Sc.)
 KELLY & BURRAGE, 1920, (Med. Biog.)
 LOVERING, 1881, (Boston & Mass.)
 MERRILL, G. P., (1), 1906, (Geologists)
 NATIONAL ACAD. SC., 1877, (1), (Memoirs)
 PALMER, (1), 1908
 PUTNAM, 1865, (Directory Naturalists)
 YOUMANS, 1896, (Pioneers Sc.)

For the Biography of special groups of workers, consult name of the special field, sub-head Biography, as BOTANY: Biography.

For the Biography of an individual naturalist, see the BIBLIOGRAPHY OF BIOGRAPHIES, following the Geographical Index.

History:

BALLARD, 1897, (Berkshire Co., Mass.)
 BARTON, 1807
 BENJAMIN, (2), 1893, (N. Y. City)
 BRAGG, (2), 1920, (S. C.)
 CENTURY, 1918, (Amer. J. Sc.)
 CLARKE, (3), 1921, (N. Y. State)
 CLINTON, 1815
 COBB, 1896, (Univ. N. C.)
 DE KAY, 1826
 FAIRCHILD, (3), 1923, (Hist. Amer. Assoc. Adv. Sc.)
 FARRINGTON, 1915, (Museums)
 FEATHERSTONHAUGH, 1832
 FINCH, 1833

GOODE, (1), 1886
 GOODE, (2), 1888
 GOODE, (3), 1889
 GOODE, (6), 1892
 GOODE, (7), 1897
 GOULD, (2), 1865, (Mass. & Bost.)
 HOLLIDAY, 1914, (New Harmony, Indiana)
 HOSACK, (2), 1811, (Courses at N. Y. U.)
 JARVIS, 1836

JORDAN, (1), 1910, (Amer. Men of Science)
 KINGSLEY, W. L., 1879, (Science at Yale College)
 KLEM, 1914, (Hist. Sc. St. Louis)
 LUCAS, 1908, (Linnaeus & Amer. Nat. Hist.)
 MERRILL, G. P., (1), 1906, (Geol., Pal., Min., Zool.)
 MORSE, (2), 1887, (Evolution)

OSBOEN, 1912, (N. Y. State)
 PORTER, 1896, (Penn-German in Nat. Sc.)
 QUINCY, 1840, (Science at Harvard College)
 RAFINESQUE, 1817
 BOTHEROCK, 1893, (Hist. Biology Univ. Pa.)
 SEWARD, 1842, (N. Y. State)
 SHECUT, 1819, (Charleston, S. C.)
 SILLIMAN, (2), 1847
 STEVENS, (1), 1909, (Southern Bot. & Civil War)
 STEVENS, (2), 1920, (Radicalism & research)
 TYLER, 1915, (Va.)
 WARREN, J. C., 1853, (Mass. & Bost.)
 WELLS, 1851-71, (Annual résumés, 1850-70)
 WILDER, 1881, (Boston & Mass.)

For the history of a special branch of Natural History, consult name of that branch, sub-head History, as MINERALOGY: History.

NEOCENE.

Bibliography:

DALL & HARRIS, 1892, (N. A.)
 DARTON, (1), 1896, (1732-1891)
 MILLER, S. A., (2), 1879, (Literature)
 NICKLES, 1909-date, (For 1908-date)
 WEEKS, F. B., (1), 1902, (Formation names)
 WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)
 WILLIS, 1912, (Index to stratigraphy)

See also MIOCENE, PLIOCENE, TERTIARY, & CENOZOIC: Bibliography.

History:

DALL & HARRIS, 1892, (N. A.)
 MILLER, S. A., (2), 1879, (Literature)

See also MIOCENE, PLIOCENE, TERTIARY, & CENOZOIC: History.

NEWARK SYSTEM.

Bibliography & History:

MILLER, S. A., (2), 1879, (Literature)
 RUSSELL, 1892, (N. A.)

See also MESOZOIC.

NOMENCLATURE (BOTANICAL).

Bibliography:

CHRISTENSEN, 1906, (Index Filicum)
 FARLOW, 1905, (Index N. A. Fungi)
 INTERNATIONAL CAT. SC. LIT., 1901-date
 JACKSON, B. D., (2), 1893, (Index Kewensis)
 LINDAU & SYDOW, 1908, (Fungi & Lichens)
 PARIS, 1894, (Index Bryologicus)

PFEIFFER, 1873, (Nomenclator Botanicus)

WATSON, 1878, (Index N. A. Botany)

History:

See BIBLIOGRAPHY, above: & BOTANY: History.

NOMENCLATURE (GEOLOGICAL & PALAEOONTOLOGICAL)

Bibliography:

CLARK, (2), 1891, (Eocene)

DALL & HARRIS, 1892, (Neocene)

RUSSELL, 1892, (Newark System)

VAN HISE, 1892, (Archaean & Algonkian)

VAN HISE & LEITH, (1), 1909, (Pre-Cambrian)

WALCOTT, (2), 1891, (Cambrian)

WEEKS, F. B., (1), 1902, (Formation names)

WHITE, 1891, (Cretaceous)

WILLIAMS, 1891, (Devonian & Carboniferous)

See also GEOLOGY: Bibliography & History.

PALAEOONTOLOGY: Bibliography & History.

TACONIC SYSTEM: History.

History:

CLARK, (2), 1891, (Eocene)

DALL & HARRIS, 1892, (Neocene)

DANA, J. D., (3), 1896, (Taconic System)

HALL, J., 1878, (Hudson River Group)

HUNT, (1), 1883, (Taconic System)

MARCOU, Jules, 1884, (Taconic System)

MERRILL, G. P., (1), 1906

RUSSELL, 1892, (Newark System)

VAN HISE, 1892, (Archaean & Algonkian)

VAN HISE & LEITH, (1), 1909, (Pre-Cambrian)

WALCOTT, (1), 1888, (Taconic System)

WALCOTT, (2), 1891, (Cambrian)

WEEKS, F. B., (1), 1902, (Formation names)

WHITE, 1891, (Cretaceous)

WILLIAMS, 1891, (Devonian & Carboniferous)

WILLIS, 1912, (Index to Stratigraphy, N. A.)

See also GEOLOGY: Bibliography & History.

PALAEOONTOLOGY: Bibliography & History.

TACONIC SYSTEM: History.

NOMENCLATURE (ZOOLOGICAL)

Bibliography:

AGASSIZ, (1), 1842, (Nomenclator Zoologicus)

CATLOW & REEVE, 1845, (Conchology)

DYAR, 1902, (Lepidoptera, N. A.)

GIEBEL, 1872, (Ornithology)

INTERNATIONAL CAT. SC. LIT., 1901-date

MARSHALL, 1873, (Nomenclator Zoologicus)

PALMER, (2), 1904, (Index Mammalium)

RIDGWAY, (2), 1901, (Ornithology N. A.)

SCUDDER, (5), 1901, (Index N. A. Orthoptera)

SCUDDER, (6), 1882, (Nomenclator Zoologicus)

SHERBORN, (1), 1893, (Index Foraminifera)

SHERBORN, (2), 1902, (Index animalium, 1758-1800)

TROUCESSART, 1897, (Catalogus Mammalium)

See also PALAEONTOLOGY: Bibliography.

ZOOLOGY: Bibliography.

History:

JORDAN, (4), (5), (6), 1917-20, (Ichthyology)

RIDGWAY, (1), 1881, (Ornithology)

SCUDDER, (8), 1875, (Butterflies)

TROTTER, 1910, (N. A. Land Birds)

See also above: Bibliography.

PALAEONTOLOGY: History.

ZOOLOGY: History.

ORDOVICIAN, see SILURIAN (LOWER).

ORNITHOLOGY.

Bibliography:

ANDERSON, 1906, (Iowa)

BURNS, (1), 1919, (Chester Co., Pa.)

BUTLER, 1894, (Indiana)

CORY, 1901, (Ill. & Wis.)

COUES, (1), 1878

FAXON & HOFFMANN, 1897, (Berkshire Co., Mass.)

GIEBEL, 1872

GRINNELL, 1909, (California)

KNIGHT, 1908, (Maine)

LOOMIS, 1891, (S. C.)

MC ATEE, 1918, (D. C.)

RIDGWAY, (2), 1901, (Nomenclature, synonymy)

RIVES, 1890, (Va.)

SAGE, 1913, (Conn.)

SCLATER, 1912, (Col.)

THAYER, 1913, (Thayer's Library)

TOWNSEND, 1905, (Essex Co., Mass.)

WATERHOUSE, 1889, (Index Avium)

WAYNE, 1910, (S. C.)

WHEATON, 1882, (Ohio)

See also ZOOLOGY: Bibliography.

History:

ANDERSON, 1906, (Iowa)

BURNS, (1), 1919, (Chester Co., Pa.)

BURNS, (2), 1917, (Miss Lawson's Recollections)

COUES, (2), 1903

FOWLER, (2), 1862

HANKINSON, 1897, (Michigan)

LOOMIS, 1891, (S. C.)

MC ATEE, 1918, (D. C.)

PEARSON, 1908, (N. C.)

REA, (3), 1910, (S. C.)

RIDGWAY, 1881, (Nomenclature)

RIVES, 1890, (Va.)

ROCKWELL, 1909, (Colorado)

STONE, W., (1), 1916, (Western States)

STONE, W., (2), 1899, (Phila.)

TOWNSEND, 1905, (Essex Co., Mass.)

WIDMANN, 1907, (Mo.)

See also NOMENCLATURE (ZOOLOGICAL): History.

ZOOLOGY: History.

ORTHOPTERA.

Bibliography & History:

See ENTOMOLOGY: Bibliography & History.

PALAEOBOTANY.

Bibliography:

DARTON, (1), 1896, (For 1732-1891)

INTERN. CAT. SC. LIT., 1901-date, (Current)

KNOWLTON, 1898, (Cretaceous & Tertiary)

LESLEY, (1), 1889, (Dictionary Pa. Fossils)

LESQUEREUX, 1876, (Cretaceous)

NICKLES, 1909-date, (For 1908-date)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WEEKS, F. B., (1), 1902, (Formation names)

WILLIS, 1912, (Index to stratigraphy)

See also GEOLOGY, PALAEONTOLOGY: Bibliography.

BOTANY: Bibliography.

History:

LESQUEREUX, 1876, (Cretaceous)

MILLER, S. A., (2), 1879, (Literature, Mesozoic, & Cenozoic)

WARD, (1), 1885

WARD, (2), 1885, (Laramie Group)

See also BOTANY, GEOLOGY, PALAEONTOLOGY: History.

PALAEONTOLOGY.

Bibliography:

AGASSIZ & STRICKLAND, 1848

BABB, 1913, (Me.)

BAKER, F. C., 1911, (Lymnaeidae)

BARBOUR & FISHER, 1902, (Neb.)

BASSLER, 1915, (Ordovician & Silurian)

BERRY, (2), 1911, (Lower Cretaceous, Md.)

BLACK, 1916, (N. J.)

BOVEE, 1918, (Wyo.)

BOYLE, 1893, (Mesozoic Invertebrata)

BRANNER, (2), 1909, (Ark.)

BRITISH MUS. NAT. HIST., 1903

BROWN, S. B., 1901, (W. Va.)

CLARK, (2), 1891, (Eocene)

CLARK, (3), 1916, (Upper Cretaceous, Md.)

CLARK & MARTIN, 1901, (Eocene, Md.)

CLARK & TWITCHELL, 1915, (Mesozoic Echinodermata)

CLARKE, J. M., (2), 1894, (N. Y.)

COCKRILL, 1911, (Tenn.)

DALL & HARRIS, 1892, (Neocene)

DARTON, (1), 1896, (U. S. 1732-1891)

DERBY & PROSSER, 1906, (Ohio)

ELLIS, 1903, (N. Y. State)

GIRARD, 1852, (For 1851)

GRABAU & SHIMER, 1910, (N. A. Invert.)

PALEONTOLOGY.

Bibliography (cont.)

- GREGORY, (2), 1907, (Conn.)
 HARRIS, 1894, (Tertiary Arkansas)
 HAY, O. P., 1902, (Vertebrata)
 HITCHCOCK, Ed., (3), 1858, (Fossil Footmarks)
 INTERNATIONAL CAT. SC. LITERATURE, (Current)
 JONES, 1914, (Colorado)
 KEYES, (1), 1893, (Iowa)
 KEYES, (2), 1913, (Iowa)
 KINDLE, 1897, (Indiana)
 KNOWLTON, 1898, (Cretaceous & Tertiary Plants)
 LANEY & WOOD, 1909, (N. C.)
 LESLEY, (1), 1889, (Dictionary Fossils Pa.)
 MARCOU, 1885, (Invertebrates)
 MARGERIE, 1896, (Bibliography)
 MATHEWS, (1), 1898, (Maryland)
 NICKLES & BASSLER, 1900, (Bryozoa)
 NICKLES, 1908, (U. S. 1908—date)
 O'DONNELL, 1913, (Washington State)
 O'HARRA, (1), 1900, (Black Hills, S. D.)
 O'HARRA, (3), 1917, (Black Hills, S. D.)
 PROSSER, (2), 1913, (Lower Devonian, Md.)
 RUSSELL, 1892, (Newark System)
 SAMPSON, 1890, (Mo.)
 SCHUCHERT, (2), 1897, (Brachiopoda)
 SCUDDER, (3), 1890, (Insects)
 SELLARDS, (1), 1907, (Fla.)
 SHATTUCK, (2), 1904, (Miocene, Md.)
 SHATTUCK, (3), 1906, (Pliocene & Pleistocene)
 SHUMARD, 1865, (Palaeozoic Echinodermata)
 TROUT & MYERS, 1915, (Oklahoma)
 TRUBNER, 1859
 VAN HISE, 1892, (Archaeon & Algonkian)
 VAN HISE & LEITH, (1), 1909, (Pre-Cambrian)
 VOGDES, (1), 1893, (Crustacea)
 VOGDES, (2), 1905, (California)
 VOGDES, (4), 1903, (California)
 WALCOTT, (2), 1891, (Cambrian)
 WALCOTT, (3), 1890, (Olenellus Fauna)
 WARD, (1), 1885, (Palaeobotany)
 WARD, (2), 1885, (Laramie Group Flora)
 WARMAN, 1880, 1893, 1901-3, (U. S. Geol. Surv.)
 WATSON, T. L., 1897, (Virginia)
 WEEKS, F. B., (2) & (3), 1902, (U. S. for 1892-1900)
 WEEKS, F. B., (4), 1906, (U. S. for 1901-5)
 WEEKS, F. B. & NICKLES, 1909, (U. S. for 1906-7)
 WELLER, 1898, (Carboniferous Invertebrata)
 WHITE, 1891, (Cretaceous)
 WHITE & NICHOLSON, 1897, (Invertebrates)
 WHITNEY, (2), 1882
 WILLIAMS, 1891, (Devonian & Carboniferous)
 WINCHELL, N. H., (1), 1873, (Minnesota)

See also NATURAL HISTORY: Bibliography; PALAEOBOTANY: Bibliography;

Biography:

MERRILL, G. P., (1), 1906

See also GEOLOGY: Biography.

NATURAL HISTORY (GENERAL): Biography.

ZOOLOGY: Biography.

BOTANY: Biography.

History:

BAKER, F. C., 1911, (Lymnaeidae)

BERRY, (2), 1911, (Lower Cretaceous, Md.)

BLATCHLEY, 1917, (Indiana)

CARPENTER, 1857, (Mollusca Pacific Coast)

CLARK, (2), 1891, (Eocene)

CLARK, (3), 1916, (Upper Cretaceous, Md.)

CLARK & MARTIN, 1901, (Eocene, Md.)

CLARK, (4), 1893, (Cretaceous & Tertiary, N. J.)

DALL & HARRIS, 1892, (Neocene)

GOODE, (2), 1888

GREGORY, (1), 1918, (Amer. J. Sc.)

HUNT, (3), 1878, (Pre-Silurian Geol.)

LESQUEREUX, 1876, (Cretaceous Flora N. A.)

LULL, 1918, (Vertebrates)

MARCOU, Jules, (2), 1894, (Texas Cretaceous)

MERRILL, G. P., (1), 1906

MILLER, (2), 1879, (N. A.)

PROSSER, (2), 1913, (Lower Devonian, Md.)

SHATTUCK, (2), 1904, (Miocene, Md.)

SHATTUCK, (3), 1906, (Pliocene & Pleistocene, Md.)

SMITH, E. A., (2), 1914, (Gulf coast)

VAN HISE, 1892, (Archaean & Algonkian)

VAN HISE & LEITH, (1), 1909, (Pre-Cambrian)

WALCOTT, (2), 1891, (Cambrian)

WALCOTT, (3), 1890, (Olenellus Fauna)

WARD, (1), 1885, (Palaeobotany)

WARD, (2), 1885, (Laramie Group Flora)

WHITE, 1891, (Cretaceous)

WILLIAMS, 1891, (Devonian & Carboniferous)

WINCHELL, A., (2), 1890, (Opinions Older Rocks)

See also BOTANY:History.

GEOLOGY: History.

NATURAL HISTORY (GENERAL): History.

ZOOLOGY: History.

PALAEOZOIC.

Bibliography:

DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

SHUMARD, 1865, (Palaeozoic Echinodermata)

VOGDES, (1), 1893, (Crustacea)

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WILLIS, 1912, (Index to stratigraphy)

See also GEOLOGY, PALAEONTOLOGY: Bibliography.

CAMBRIAN, CARBONIFEROUS, DEVONIAN, PERMIAN & SILURIAN: Bibliography.

History:

HUNT, (3), 1878, (Pre-Silurian Geol.)

WINCHELL, A., (2), 1890, (Opinions Older Rocks)

See also GEOLOGY, PALAEOONTOLOGY: History.

CAMBRIAN, CARBONIFEROUS, DEVONIAN, PERMIAN, & SILURIAN: History.

PENNSYLVANIAN, see CARBONIFEROUS (UPPER)

PERIODICALS, (SCIENTIFIC), see JOURNALS, (SCIENTIFIC)

PERMIAN.

Bibliography:

See PALAEOZOIC, DEVONIAN, & CARBONIFEROUS: Bibliography.

History:

MERRILL, G. P., (1), 1906

WILLIAMS, 1891

See also PALAEOZOIC, DEVONIAN & CARBONIFEROUS: History.

PETROLOGY.

Bibliography:

INTERNATIONAL CAT. SC. LIT., 1901, (1900–date)

NICKLES, 1909, (U. S. 1908–date)

WEEKS, F. B., (2), & (3), 1902, (U. S. 1892–1900)

WEEKS, F. B., (4), 1906, (U. S. 1901–1905)

WEEKS, F. B., & NICKLES, 1909, (U. S. 1906–1907)

See also GEOLOGY: Bibliography.

History:

PIRSSON, 1918

See also GEOLOGY: History.

PLEISTOCENE.

Bibliography:

DARTON, (1), 1896, (For 1732–1891)

LEVERETT & TAYLOR, 1915, (Ind. & Mich.)

MILLER, (2), 1879, (Literature)

NICKLES, 1909–date, (For 1908–date)

SHATTUCK, (3), 1906, (Md.)

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902–6, (For 1892–1905)

WILLIS, 1912, (Index to stratigraphy)

See also CENOZOIC & QUATERNARY: Bibliography.

History:

SHATTUCK, (3), 1906, (Md.)

See also CENOZOIC & QUATERNARY: History.

PLIOCENE.

Bibliography:

DARTON, (1), 1896, (For 1732–1891)

MILLER, (2), 1879, (Literature)

NICKLES, 1909–date, (For 1908–date)

SHATTUCK, (3), 1906, (Md.)

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902–6, (For 1892–1905)

WILLIS, 1912, (Index to straigraphy)
See also TERTIARY & CENOZOIC: Bibliography.

History:

SHATTUCK, (3), 1906, (Md.)

See also TERTIARY & CENOZOIC: History.

PROTOZOA, RADIATA, ETC.

Bibliography:

CARUS & ENGELMANN, 1861, (For 1846-60)

INTERNAT. CAT. SC. LIT., 1901-date, (Current)

THOMPSON, D. W., 1885, (For 1861-1883)

See also ZOOLOGY: Bibliography.

History:

See ZOOLOGY: History.

QUATERNARY.

Bibliography:

ALDEN, 1918, (S. E. Wisconsin)

DARTON, (1), 1896, (For 1732-1891)

MILLER, (2), 1879, (Literature)

NICKLES, 1909-date, (For 1908-date)

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WILLIS, 1912, (Index to stratigraphy)

See also CENOZOIC: Bibliography.

History:

See also CENOZOIC: History.

REPTILIA, see ZOOLOGY.

SCIENCE (NATURAL), see NATURAL HISTORY (GENERAL),

SERIALS, (SCIENTIFIC).

Bibliography:

AGASSIZ, 1848

BRITISH MUS. NAT. HIST., 1903

CARUS, 1861, (For 1846-60)

ROYAL SOC. LONDON, 1867

SCUDDER, (1), 1876

SMITH. INST., 1866

TRUBNER, 1859

See also SOCIETIES, (SCIENTIFIC): Bibliography.

JOURNALS, (SCIENTIFIC): Bibliography.

History:

BENTHAM, 1867

FEATHERSTONHAUGH, 1832

GOODE, (2), 1886

MERRILL, G. P., (1), 1906

See also SOCIETIES, (SCIENTIFIC): History.

JOURNALS, (SCIENTIFIC): History.

SHELLS, see CONCHOLOGY.

SILURIAN (LOWER & UPPER)

Bibliography:

BASSLER, 1915, (N. A. Index Fossils)

DARTON, (1), 1896, (For 1732-1891)

NICKLES, 1909-date, (For 1908-date)

WEEKS, F. B., (1), 1902, (Formation names)

WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)

WILLIS, 1912, (Index to stratigraphy)

WINCHELL & ULRICH, 1895, (Lower S., Upper Mississippi Valley)

See also PALAEOZOIC: Bibliography.

History:

See also PALAEOZOIC: History.

SOCIETIES, (SCIENTIFIC)

Bibliography:

BOWKER, 1899

BRITISH MUS. NAT. HIST., 1903

GEARE, 1902, (Index Pub. U. S. Nat. Mus.)

GRIFFIN, (Historical), 1907

NOLAN, (2), 1913, (Index Pub. Phila. Acad.)

RHEES, (2), 1903, (Smith. Inst.)

SMITH. INST., 1866

TEDDER, 1911

THOMPSON, 1908

TRUBNER, 1859

WEEKS, S. B., 1891

See also SERIALS, (SCIENTIFIC): Bibliography.

JOURNALS, (SCIENTIFIC): Bibliography.

History:

ALBANY INST., 1830, (Albany Soc.)

BACHE, 1852

BALDWIN, 1901, (Conn. Acad. A. & Sc.)

BARNHART, (3), 1917, (N. Y. Acad. Sc.)

BENTHAM, 1867

BINNEY, Amos, (1), 1845, (Bost. Soc. Nat. Hist.)

BOLTON, (2), 1896, (Smith. Inst.)

BOUVE, 1880, (Bost. Soc. Nat. Hist. & Linn. Soc. New England)

BREWER, (1), 1901

CLINTON, 1815

COGSWELL, 1842

CRESSON, (1), 1909, (Amer. Ent. Soc.)

DWIGHT, 1826

ESSEX INSTITUTE, (1), & (2), 1898 & 1865, (E. I.)

FAIRCHILD, (1), 1887, (N. Y. Acad. Sc.)

FAIRCHILD, (3), 1923, (Amer. Assoc. Adv. Sc.)

FEATHERSTONHAUGH, 1832

FINCH, 1833

FORBES, 1907, (III.)

FOWLER, 1884, (Essex Inst.)

GOODE, (2), 1888

GOODE, (4), 1890

GOODE, (5), 1892

GOODE, (7), 1897, (Smith. Inst.)

GOULD, 1842, (Bost. Soc. Nat. Hist.)

GREVE, 1904, (Cincinnati)

HALE, 1896, (Amer. Assoc. Adv. Sc.)

HALL, 1885

HIGLEY, 1902, (Chic. Acad. Sc.)

HITCHCOCK, Ed., (4), 1857, (Assoc. Amer. Geol. & Nat.)
 HOWLAND, 1907, (Buffalo Soc. Nat. Sc.)

JARVIS, 1836

JOHNSON, 1910, (Springfield, Mass. Mus. Nat. Hist.)

KELBY, 1905, (N. Y. Hist. Soc.)

KINGSLEY, 1882, (Phila. Acad. Nat. Sc.)

KLEM, 1914, (Acad. Sc. St. Louis)

LESLEY, 1876, (Geol. Soc. Pa.)

LOOMIS, E., 1879, (Conn. Acad. A. & Sc.)

MARTIN, 1898, (Amer. Assoc. Adv. Sc.)

MEADS, 1872, (Albany Societies)

MERRILL, G. P., (1), 1906

MORTON, 1841, (Phila. Acad. Nat. Sc.)

NATIONAL ACAD. SC., (2), 1913, (Nat. Acad. Sc.)

NOLAN, (1), 1909, (Phila. Acad. Nat. Sc.)

POINSETT, 1841, (Nat. Inst. Prom. Sc.)

PRATT, D. J., 1870, (Albany Inst.)

RATHBUN, (2), 1917, (Columbian Inst.)

RATHBUN, (4), 1921, (Nat. Inst. Prom. Sc.)

RATHVON, 1866, (Linn. Soc., Lancaster, Pa.)

RHEES, 1901, (Smith. Inst.)

RUSCHENBERGER, 1852, (Phila. Acad. Nat. Sc.)

SCHARF & WESTCOTT, 1884, (Phila. Societies)

SEEVER, 1900, (Mo. Hist. & Phil. Soc.)

SHECUT, 1819, (Charleston, S. C.)

STARR, 1898, (Acad. Sc. St. Louis)

TRELEASE, (2), 1903, (Acad. Sc. St. Louis)

VAN AMRINGE, 1828, (Chester Co., Pa.)

VENABLE, 1886, (Hist. & Phil. Soc. Ohio)

WARREN, J. C., 1853, (Mass. & Bost.)

WHEATLAND, 1856, (Essex Co. Nat. Hist. Soc.)

WHELPLEY, 1906, (Acad. Sc. St. Louis)

WINCHELL, N. H., (7), 1914, (Amer. Geol. Societies)

SURVEYS, GEOLOGICAL (STATE)

Bibliography:

BOVEE, 1918, (Wyo.)

BRITISH MUS. NAT. HIST., 1903

DARTON, (1), 1896

DUCATEL, 1840, (Maryland)

ELLIS, 1903, (N. Y.)

HASSE, (2), 1907

HOLMES, (2), 1891, (S. C.)

HOPKINS, (1) & (2), 1904, (Ind.)

INGHAM, 1895, (Index Pubs. Pa.)

MARSH, 1867

MATHEWS, (1), 1897, (Maryland)

MICH. GEOL. & BIOL. SURV., 1912, (Mich.)

PERKINS, 1902, (Vt.)

PRIME, 1879

SELLARDS, (1), 1908, (Fla.)

VOGDEN, (4), 1903, (Cal.)

VOGDEN, (5), 1893, (Cal.)

SURVEYS, GEOLOGICAL (STATE)

Bibliography (cont.)

WARMAN, 1880, 1893, 1901-1903, (U. S. Geol. Surv.)

WEEKS, F. B., (2), & (3), 1902, (U. S. 1892-1900)

WEEKS, F. B., (4), 1906, (U. S. 1901-1905)

WINCHELL, N. H., (2), 1873, (Minn.)

See also GEOLOGY: Bibliography.

PALAEONTOLOGY: Bibliography.

History:

BAYLEY & KING, 1890, (Me.)

BLAKE, 1893, (Wis.)

BLATCHLEY, 1917, (Ind.)

BRADISH, 1889, (Mich.)

BRANNETT, (1), 1894, (Ark.)

BROADHEAD, (1), 1886, (Mo.)

BROADHEAD, (2), 1901, (Mo.)

BUCKLEY, 1874, (Texas)

CLARKE, (3), 1921, (N. Y. & General)

COOK, (2), 1864, (N. J.)

COOK, (3), 1885, (N. J.)

DUCATEL, 1840, (Md.)

GLENN, 1912, (Tenn.)

GOODE, (2), 1888

HALL, J., (2), 1882, (N. Y.)

HALL, J., (4), 1862, (Wis.)

HANKS, 1884, (Cal.)

HAWORTH & BENNETT, 1908, (Kansas)

HAY & THOMPSON, 1887, (Kansas)

HAYES, 1911, (U. S.)

HILGARD, 1901, (Miss.)

HILL, 1887, (Texas)

HITCHCOCK, C. H., (1), 1874, (N. H.)

HITCHCOCK, C. H., (2), 1896, (N. H.)

HITCHCOCK, Ed., (2), 1841, (Mass.)

HITCHCOCK, Ed., (4), 1857, (Early Days of)

HOLMES, (1), 1889, (N. C.)

HOLMES, (2), 1891, (S. C.)

JACKSON, C. T., 1844, (N. H.)

KERR, 1875, (N. C.)

KEYES, (2), 1913, (Iowa)

LESLEY, (2), 1876, (Pa.)

MERRILL, F. J. H., (1), 1898, (N. Y.)

MERRILL, F. J. H., (2), 1902, (N. Y.)

MERRILL, G. P., (1), 1906, (U. S.)

MERRILL, G. P., (2), 1920, (All States to 1885)

NEWBERRY, 1873, (Ohio)

ORTON, 1894, (Ohio)

ROGERS, 1844

SELLARDS, 1908, (2), (Fla.)

SHALER, 1877, (Ky.)

SMITH, E. A., 1894, (Ala.)

SMITH, E. A., (3), 1875, (Ala.)

SMITH, G. O., 1918, (U. S.)

STONE, R. W., 1908, (Pa.)

SWALLOW, 1855, (Mo.)
 WHITNEY, (1), 1875
 WIGHT, 1877, (Wis.)
 WINCHELL, A., 1861, (Mich.)
 WINCHELL, N. H., (4), 1884, (Minn.)
 WINCHELL, N. H., (1), 1873, (Minn.)
 WINCHELL, N. H., (5), 1894, (Minn.)
 WINCHELL, N. H., (8), 1889, (Minn.)
 WINSLOW, 1894, (Mo.)

See also GEOLOGY: History

PALAEONTOLOGY: History

SURVEYS, GEOLOGICAL (U. S.), see EXPLORATIONS

TACONIC SYSTEM.

Bibliography:

DANA, J. D., (3), 1880, (See Note)
 WINCHELL, A., (2), 1890, (Opinions Older Rocks)

See also GEOLOGY: Bibliography.

PALAEONTOLOGY: Bibliography.

History:

DANA, J. D., (3), 1886
 HUNT, 1883, (1)
 MARCOU, Jules, (1), 1884
 MERRILL, G. P., (1), 1906
 WALCOTT, (1), 1888

See also GEOLOGY: History.

PALAEONTOLOGY: History.

TERTIARY.

Bibliography:

CLARK, (4), 1893, (N. J.)
 DARTON, (1), 1896, (For 1732-1891)
 HARRIS, 1894, (Ark.)
 KNOWLTON, 1898, (T. Plants N. A.)
 NICKLES, 1909-date, (For 1908-date)
 WEEKS, F. B., (1), 1902, (Formation names)
 WEEKS, F. B., (2), (3), (4), 1902-6, (For 1892-1905)
 WILLIS, 1912, (Index to stratigraphy)

See also CENOZOIC, EOCENE, MIOCENE, NEOCENE & PLIOCENE: Bibliography & History.

History:

CLARK, (4), 1893, (N. J.)

See also CENOZOIC, etc. (as given above under Bibliography)

TRAVELS, see EXPLORATIONS.

TRIASSIC, see NEWARK SYSTEM.

ZOOLOGICAL NOMENCLATURE, see NOMENCLATURE (ZOOLOGICAL)

ZOOLOGY.

Bibliography:

AGASSIZ, (1), 1842
 AGASSIZ & STRICKLAND, (2), 1848
 BEUTENMULLER, 1891, (Transform. N. A. Coleoptera)

ZOOLOGY.

Bibliography (cont.)

- BINNEY, W. G., 1863, (Conchology)
 BRITISH MUS. NAT. HIST., 1903
 BUTLER, 1894, (Indiana Ornithology)
 CALL, 1894, (Indiana Mollusca)
 CARUS, 1861, (For 1846-60)
 CLARK, J. A., (Entomology in Dept. Agric. Library)
 COUES, (1), 1873, (Ornithology)
 GRESSON, (2), 1887, (N. A. Hymenoptera)
 DEAN & EASTMAN, 1916, (Ichthyology)
 DYAR, 1902, (N. A. Lepidoptera)
 EIGENMANN, 1894, (Indiana Ichthyology)
 EVERMANN & BUTLER, 1894, (Indiana Mammology)
 FAXON & HOFFMAN, 1897, (Berkshire Co., Ornith.)
 GIEBEL, 1872
 GILL, (2), 1873, (East Coast Fishes)
 GILL, (3), 1882, (Pacific Coast Fishes)
 GILL & COUES, 1877, (Mammology)
 GILKARD, 1852, (For 1851)
 GRABAU & SHIMER, 1910, (N. A. Invert. Fossils)
 GRAY, 1883, (Ohio Conchology)
 GRINNELL, J., 1909, (Cal. Ornith.)
 HAGEN, 1862, (Entomology)
 HAMILTON & HENSHAW, 1891, (N. A. Coleoptera)
 INTERNATIONAL CAT. SC. LIT., 1901-date
 JORDAN, (7), 1882, (Ohio Fishes)
 KENDALL, 1914, (Me. Ichthyology)
 LANGDON, 1883, (Cincinnati)
 LETSON, 1905, (N. Y. State Mollusca)
 MCATEE, 1918, (D. C.)
 MARCOU, J. B., 1885, (Fossil Invertebrates)
 MARSCHALL, 1873, (Nomenclature)
 MINOT, 1893, (Vertebrate Embryology)
 MULDER, 1874, (Ichthyology)
 PALMER, (2), 1904, (Index Mammalium)
 RIDGWAY, (2), 1901, (Ornithology, N. A.)
 RIVES, 1890, (Va. Ornithology)
 SAGE, 1913, (Conn. Ornithology)
 SCHWARZ, (2), 1888, (N. A. Insects)
 SCLATER, 1912, (Col. Ornithology)
 SCUDDER, (3), 1890, (Fossil insects)
 SCUDDER, (4), 1869, (Harris's Entomological Corres.)
 SCUDDER, (5), 1901, (N. A. Orthoptera)
 SCUDDER, (6), 1882, (Nomenclature)
 SCUDDER, (7), 1868, (N. A. Orthoptera)
 SHERBORN, (2), 1902, (Index animalium, 1758-1800)
 SHEEBORN, (1), 1893, (Foraminifera)
 STILES & HASSALL, 1912, (Medical and Veterinary)
 THOMPSON, D. W., 1885, (Protozoa, Radiata: 1861-1883)
 TROUESSART, 1897, (Catalogus Mammalium)
 TRUBNER, 1859
 TRYON, (1), 1861, (Conchology)
 UNDERWOOD, (1), 1893, (Myriapoda)

WHEATON, 1882, (Ohio Ornithology)

WOODWARD, 1886, (Foraminifera)

See also NATURAL HISTORY: History & Bibliography.

PALAEONTOLOGY: History & Bibliography.

GEOLOGY: History & Bibliography.

Biography.

GOODE, (2), 1888

JORDAN, (1), 1910

MERRILL, G. P., (1), 1906

MORRIS, 1846, (Entomologists)

NATIONAL ACAD. SC., 1877

SMITH, J. B., 1910, (Entomologists)

YOUMANS, 1896

See also NATURAL HISTORY: History.

History.

ALLEN, 1891, (Mammalogy)

BARDEEN, 1905, (Comparative Anatomy)

BENTHAM, 1867

BINNEY, Amos, (2), 1851

BURGESS, 1875, (Hentz's Writings on Spiders)

CARPENTER, 1857, (Mollusca West Coast N. A.)

CLINTON, 1815

COE, 1918

COUES, (2), 1913, (Ornithology)

DE KAY, 1826

EVERMANN, 1917, (Indiana)

FOWLER, (2), 1862, (Ornithology)

GILL, (1), 1904, (Mass. Ichthyology)

GOODE, (1), 1886

GOODE, (2), 1888

GRAEF, 1914, (Brooklyn Entomology)

GRINNELL, F., 1914, (California Entomology)

HANKINSON, 1897, (Michigan Ornithology)

JORDAN, (2), 1919, (Ichthyology)

JORDAN, (3), 1902, (Ichthyology)

JORDAN, (4), (5), (6), 1917-19, (Nomencl. Ichthy.)

JORDAN, (8), 1905, (Ichthyology)

MC ATEE, 1918, (D. C.)

MAZYCK, 1913, (S. C. Conchology)

MERRILL, G. P., (1), 1906

MORSE, A. P., 1920, (New England Orthoptera)

MORSE, (1), 1884, (Essex Co., Mass.)

MORSE, (2), 1877, (Evolution)

PACKARD, 1876

PALMER, (3), 1912, (Game Protection)

PEARSON, 1908, (N. C. Ornithology)

PRATT, H. S., 1916

RAFINESQUE, 1817

RATHBUN, (1), 1883, (Ichthyology)

RIVES, 1890, (Va. Ornithology)

ROCKWELL, 1909, (Col. Ornithology)

SCHWARZ, (1), 1890, (Entomology)
SKINNER, 1911, (Entomology)
STONE, Wit., (1), 1916, (Ornith. Western States)
STONE, Wit., (2), 1899, (Ornithology Phila.)
TOWNSEND, 1905, (Ornith. Essex Co., Mass.)
TRYON, (2), 1862, (Conchology)
UNDERWOOD, (5), 1887, (Arachnology)
WIDMANN, 1907, (Ornith. Mo.)
WILLISTON, 1896, (N. A. Diptera)
WILSON, 1912
WINCHELL, N. H., (1), 1873, (Minn.)
WINCHELL, N. H., (4), 1874, (Minn.)

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GEOGRAPHIC INDEX TO ANNOTATED BIBLIOGRAPHY

BIBLIOGRAPHICAL NOTE

The following general works apply to all the states and other places contained in the following GEOGRAPHIC INDEX; and are therefore not repeated under each place or state. All are Bibliographies unless otherwise indicated.

- AGASSIZ & STRICKLAND, 1848, (Geol. & Zool.)
 BINNEY, W. G., 1863, (Conchology)
 BRITTON, (2), 1890, (State & Local Floras)
 BRENDDEL, 1879, (Hist. Amer. Bot.)
 COUES, (1), 1878, (Ornithology)
 DARTON, (1), 1896, (U. S. Geol., Pal., Min., 1732-1891)
 DEAN & EASTMAN, 1916, (Ichthyology)
 GILL & COUES, 1877, (Mammals)
 INTERNATIONAL CAT. SC. LIT., 1901-date, (Current for Geol., Bot., Min., Pal., Zool., Anthrop., etc.)
 MERRILL, F. J. H., (3), 1903, (Nat. Hist. Mus.)
 NICKLES, 1909, (U. S. Geol., Min., Pal., for 1908-date)
 REA, (1), 1910, (Directory Amer. Mus.)
 ROYAL SOC. CAT. SC. LIT., 1867-date, (All Sc. to 1900)
 WARMAN, 1880-1903, (U. S. Geol. Surv. Pub.)
 WEEKS, F. B., (2), (3), (4), 1902-6, (U. S. Geol., Min., Pal., 1892-1905)
 WEEKS & NICKLES, 1909, (U. S. Geol., Pal., Min., 1906-7)

ADIRONDACKS.

- KEMP, 1892, (Hist. Geol.)

ALABAMA.

- HAYES, 1911, (Geol. Surv.)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 MOHR, 1901, (Hist. Botanical Explor.)
 SMITH, E. A., (1), 1894, (Geol. Surv.)
 SMITH, E. A., (2), 1914, (Hist. Gulf Coast Geol.)
 SMITH, E. A., (3), 1875, (Hist. Surv.)
 THOMPSON, 1908, (Learned Soc.)

See also SOUTHERN STATES.

ALBANY, N. Y.

- ALBANY INST., 1830, (Albany Soc.)
 ELLIS, 1903, (Bib. N. Y. State Mus.)
 MEADS, 1872, (Albany Soc.)
 PRATT, D. J., 1870, (Albany Inst.)

ALLEGHANY CO., MD.

- O'HARRA, (4), 1900, (Hist. & Bib. Geol.)
 See also MARYLAND.

ALLEGHANY MOUNTAINS.

GRAY, Asa, (1), 1841, (Hist. Bot. Explor.)

STOCKBRIDGE, 1911, (Bib. Southern Appalachians)

ARIZONA.

HAYES, 1911, (Geol. Surv.)

LUTRELL, 1915, (Bib. Geol.)

See also WESTERN STATES.

ARKANSAS.

BRANNER, (1), 1894, (Geol. Surv.)

BRANNER, (2), 1909, (Bib. Geol.)

HARRIS, 1894, (Hist. Tertiary)

HAYES, 1911, (Geol. Surv.)

MERRELL, G. P., (1), 1906, (Hist. Geol.)

MERRELL, G. P., (2), 1920, (State Surv. to 1885)

WILLIAMS, J. F., 1891, (Igneous Rocks)

See also SOUTHERN STATES; WESTERN STATES.

ATLANTIC COAST.

GILL, (2), 1873, (Bib. Fishes)

KOHL, 1885, (Hist. Explor.)

SMITH, E. A., (2), 1914, (Hist. Geol. Gulf Coast Plain)

BERKSHIRE COUNTY, MASS.

BALLARD, 1897, (Hist. Sc.)

DANA, J. D., (2), 1886, (Hist. Geol.)

FAXON & HOFFMANN, 1897, (Hist. Ornith.)

WHIPPLE, 1889, (Hist. Bot.)

BLACK HILLS, SOUTH DAKOTA.

O'HARRA, (1), 1900, (Bib. Geol.)

O'HARRA, (2), 1900, (Hist. Explor.)

O'HARRA, (3), 1917, (Bib. Geol.)

See also WESTERN STATES.

BOSTON.

ANON, 1881, (Sc. Institutions)

BINNEY, A., (1), 1845, (Bost. Soc. Nat. Hist.)

BOUVE, 1880, (Bost. Soc. Nat. Hist.) & (Linn. Soc. New England)

GOULD, (1), 1842, (Bost. Soc. Nat. Hist.)

GOULD, (2), 1865, (Hist. Nat. Hist.)

LOVEBING, 1881, (Hist. Science)

STRONG, 1880, (Mass. Hort. Soc.)

WARREN, J. C., 1853, (Bost. Soc. Nat. Hist.)

WILDER, 1881, (Horticulture & Botany)

See also MASSACHUSETTS.

BROOKLYN, NEW YORK.

GAGER, (2), 1918, (Botanic Gardens)

GRAEF, 1914, (Hist. Entomology)

See also NEW YORK (CITY)

BUFFALO, NEW YORK.

HOWLAND, 1907, (Buffalo Acad. Nat. Sc.)

CALIFORNIA.

- BREWER, (2), 1880, (Bot. Collections)
GRINNELL, F., 1914, (Hist. Entomology)
GRINNELL, J., 1909, (Bib. Ornithology)
HANKS, 1884, (Hist. State Surv.)
HASSE, (2), (Index Econ. Material)
HAYES, 1911, (Geol. Surv.)
JEPSON, 1893, (Early Sc. Exped.)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)
THOMPSON, 1908, (Learned Soc.)
VOGDES, (2), 1905, (Bib. Geol., Pal. & Min.)
VOGDES, (4), 1903, (Bib. Geol., Pal., & Min.)
VOGDES, (5), 1893, (Geol. Surv.)

See also PACIFIC COAST; WESTERN STATES.

CALVERT CO., MD.

- SHATTUCK, (4), 1907, (Hist. & Bib. Geol.)

See also MARYLAND.

CAMBRIDGE, MASS.

- AGASSIZ, A., 1902, (Mus. Comp. Zool.)
INGERSOLL, 1886, (Cambridge Bot. Gard.)
TUCKER, 1914, (Cat. Library Arnold Arbor.)

See also MASSACHUSETTS.

CAYUGA CO., N. Y.

- DUDLEY, 1886, (Hist. Bot. Explor.)

See also N. Y. (STATE)

CECIL CO., MD.

- SHATTUCK, (1), 1902, (Hist. Geol.)

See also MARYLAND.

CHAPEL HILL, N. C.

- COBB, 1896, (Hist. Sc. at Univ. N. C.)

See also NORTH CAROLINA.

CHARLESTON, S. C.

- BRAGG, (3), 1923, (Hist. Charleston Mus.)
REA, (2), 1915, (Charleston Mus.)
SHECUT, 1819, (Hist. Sc.)

See also SOUTH CAROLINA.

CHESTER CO., PA.

- BURNS, (1), 1919, (Hist. & Bib. Ornith.)
VAN AMRINGE, 1828, (Chester Co. Cab. Nat. Sc.)

CHICAGO.

- HIGLEY, 1902, (Chic. Acad. Sc.)

See also ILLINOIS.

CINCINNATI.

- GREVE, 1904, (Nat. Hist. Soc.)
JAMES, 1881, (Floras)
LANGDON, 1883, (Hist. Fauna)

COLORADO.

- ALLISON, 1908, (Bib. & Hist. Bot.)
HAYES, 1911, (Geol. Surv.)
HENDERSON, 1907, (Bib. Mollusca)
JONES, 1914, (Bib. Geol.)
ROCKWELL, 1909, (Hist. Ornithology)
SCLATER, 1912, (Bib. Ornithology)

See also WESTERN STATES.

CONNECTICUT.

- BALDWIN, 1901, (Conn. Acad. A. & Sc.)
BARNHART, (1), 1915, (Bib. Local Floras)
GRAVES, 1910, (Hist. Bot.)
GREGORY, H. E., (2), 1907, (Bib. Geol.)
HAYES, 1911, (Geol. Surv.)
HERRICK, E. C., 1840, (Conn. Acad. A. & Sc.)
HITCHCOCK, Ed., (3), 1858, (Fossil Footmarks)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)
SAGER, 1913, (Bib. Ornith.)
THOMPSON, 1908, (Learned Soc.)
WEATHERBY, 1904, (Old-time Herbaria)

See also ATLANTIC COAST; HARTFORD; MIDDLETOWN; NEW ENGLAND;
NEW HAVEN.

DELAWARE.

- HASSE, (2), 1910, (Index Econ. Material)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)

DISTRICT OF COLUMBIA, see WASHINGTON, D. C.

EAST COAST, see ATLANTIC COAST.

ESSEX COUNTY, MASS.

- MCDANIEL, 1884, (Hist. Geol. & Min.)
ROBINSON, (1), 1880, (Botanists)
ROBINSON, (2), 1884, (Hist. Bot.)
TOWNSEND, 1905, (Hist. & Bib. Ornithology)

See also SALEM, MASS.

FLORIDA.

- HAYES, 1911, (Geol. Surv.)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)
SELLARDS, (1), 1908, (Bib. Geol.)
SELLARDS, (2), 1908, (Hist. Geol.)
SMITH, E. A., (2), 1914, (Hist. Gulf Coast Geol.)

See also ATLANTIC COAST; SOUTHERN STATES.

GARRETT CO., MD.

- MARTIN, G. C., 1902, (Hist. & Bib. Geol.)

See also MARYLAND.

GEORGIA.

- HAYES, 1911, (Geol. Surv.)
MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

SMITH, E. A., (2), 1914, (Hist. Gulf Coast Geol.)

See also ATLANTIC COAST; SOUTHERN STATES.

GREEN MOUNTAINS, VERMONT.

WHITTLE, 1894, (Hist. Geol.)

GREYLOCK, MT., MASS.

DALE, 1894, (Hist. & Bib. Geol.)

See also MASSACHUSETTS.

HAMPSHIRE CO., MASS.

EMERSON, 1898, (Hist. Geol. Old H. Co.)

See also MASSACHUSETTS.

HARTFORD, CONN.

JARVIS, 1836, (Nat. Hist. Soc. Hartford)

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ILLINOIS.

BAKER, F. C., (2), 1910, (Bib. Mollusca)

COBY, 1901, (Bib. Ornithology)

CROOK, 1908, (Ill. State Mus. Nat. Hist.)

FORBES, 1907, (Nat. Hist. Soc. of Ill.)

HASSE, (2), (Index Econ. Material)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

THOMPSON, 1908, (Learned Soc.)

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INDIANA.

BLATCHLEY, 1917, (Hist. Geol.)

BUTLER, 1894, (Bib. Ornith.)

CALL, 1894, (Mollusca)

COULTER, 1917, (Hist. Bot.)

EIGENMANN, 1894, (Bib. Fishes)

EVERMANN, 1917, (Hist. Zool.)

EVERMANN & BUTLER, 1894, (Bib. Mammals)

HAYES, 1911, (Geol. Surv.)

HOLLIDAY, 1914, (Hist. Sc. at New Harmony)

HOPKINS, (1), 1904, (Bib. Geol. Surv. Pub.)

HOPKINS, (2), 1904, (Index Geol. Surv. Pub.)

KINDLE, 1897, (Pal.)

LEVERETT, 1915, (Pleistocene—Hist.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

MARSTERS & KINDLE, 1894, (Bib. Geol.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

THOMPSON, 1908, (Learned Soc.)

UNDERWOOD, (2), 1894, (Bib. Bot.)

IOWA.

ANDERSON, 1906, (Hist. & Bib. Ornith.)

HAYES, 1911, (Geol. Surv.)

KEYES, (1), 1893, (Bib. Geol.)

KEYES, (2), 1913, (Hist. & Bib. Geol., Pal., Miner.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

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KANSAS.

ADAMS, 1898, (Hist. Upper Cretaceous)

HAWORTH & BENNET, 1908, (Hist. & Geol.)

HAY, Rob., 1896, (Bib. Geol.)

HAY, Rob., & THOMPSON, 1887, (Hist. Geol.)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

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KENTUCKY.

HASSE, (2), 1910, (Index Econ. Material)

HOVEY & CALL, 1913, (Bib. Mammoth Cave)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

SHALER, 1877, (Hist. Surv.)

SHORT, 1836, (Botanists)

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LANCASTER, PA.

RATHVON, 1866, (Linn. Soc., Lancaster, Pa.)

LEXINGTON, KY.

HARRISON, 1913, (Transylvania Univ. Bot. Gard.)

LONG ISLAND, N. Y.

FULLER, 1914, (Hist. & Bib. Geol.)

GAGER, (1), 1912, (Linnaean Garden at Flushing)

LOUISIANA.

COCKS, 1904, (Hist. Bot.)

HARRIS & VEATCH, 1899, (Hist. Geol. & Explor.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

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MAINE.

BABB, 1913, (Bib. Geol.)

BAYLEY & KING, 1890, (Hist. Geol. Surv.)

HASSE, (2), 1907, (Index Econ. Material)

HAYES, 1911, (Geol. Surv.)

KENDALL, 1914, (Bib. Fishes)

KNIGHT, 1908, (Bib. Birds)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

See also ATLANTIC COAST; NEW ENGLAND.

MAMMOTH CAVE, KY.

HOVEY & CALL, 1913, (Bibliography)

MARYLAND.

- BERRY, (2), 1911, (Hist. Lower Cretaceous)
 CLARK, (1), 1898, (Hist. Geol.)
 CLARK & MARTIN, 1901, (Hist. Eocene)
 CLARK & MATHEWS, 1906, (Hist. Geol.)
 DUCATEL, 1840, (Hist. Geol. Surv.)
 HAYES, 1911, (Geol. Surv.)
 MARTIN, G. C., 1902, (Hist. Geol. Garret Co.)
 MATHEWS, (1), 1897, (Bib. Geol., Min. & Maps)
 MATHEWS, (2), 1898, (Hist. Maps)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 MILLER, B. L., 1911, (Hist. Geol. Prince George's Co.)
 O'HARRA, (4), 1900, (Hist. Geol. Alleghany Co.)
 PROSSER, (2), 1913, (Hist. Devonian)
 SHATTUCK, (1), 1902, (Hist. Geol. Cecil Co.)
 SHATTUCK, (2), 1904, (Hist. Miocene)
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 SHATTUCK, (5), 1907, (Hist. Geol. St. Mary's Co.)
 THOMPSON, 1908, (Learned Soc.)

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MASSACHUSETTS.

- EMERSON, 1898, (Hist. Geol. Old Hampshire Co.)
 GILL, (1), 1904, (Hist. Ichthyology)
 GOULD, (2), 1865, (Hist. Nat. Hist.)
 HASSE, (2), 1908, (Index Econ. Material)
 HITCHCOCK, E., (2), 1841, (Geol. Surv.)
 HITCHCOCK, E., (3), 1858, (Fossil Footmarks)
 LOVERING, 1881, (Hist. Boston & Vicinity)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 STRONG, 1880, (Mass. Hort. Soc.)
 WILDER, 1881, (Horticulture Boston & Vicinity)

See also ATLANTIC COAST; BERKSHIRE COUNTY; BOSTON; CAMBRIDGE;
 ESSEX COUNTY; GREYLOCK, MT.; NEW ENGLAND; SALEM; SPRING-
 FIELD.

MICHIGAN.

- BAYLEY, 1904, (Bib. Geol. Iron District)
 BRADISH, 1889, (Hist. Geol. Surv. & Explor.)
 HANKINSON, 1897, (Hist. Ornithology)
 HAYES, 1911, (Geol. Surv.)
 IRVING, (2), 1892, (Bib. Geol. Penokee Iron District)
 LANE, 1904, (Hist. Geol.)
 LEVERETT, 1915, (Hist. Pleistocene)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 MICH. GEOL. & BIOL. SURV., 1917, (Cat. Pub.)
 WINCHELL, A., (1), 1861, (Hist. Geol.)

MIDDLETOWN, CONN.

- JOHNSTON, 1877, (Hist. Mus. Wesleyan Univ.)

MINNESOTA.

- GREGORY, Win., 1915, (Bib. Geol.)
HAYES, 1911, (Geol. Surv.)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)
UPHAM, (2), 1914, (Explor. Red & Minn. Rivers)
WINCHELL, N. H., (1), 1873, (Hist. & Bib. Nat. Hist.)
WINCHELL, N. H., (2), 1874, (Hist. Explor.)
WINCHELL, N. H., (3), 1882, (Bib. Min.)
WINCHELL, N. H., (4), 1884, (Hist. Explor.)
WINCHELL, N. H., (5), 1894, (Hist. Geol.)
WINCHELL, N. H., (8), 1889, (Geol. Surv.)

See also WESTERN STATES.

MISSISSIPPI.

- HAYES, 1911, (Geol. Surv.)
HILGARD, 1901, (Geol. Surv.)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)

See also SOUTHERN STATES.

MISSISSIPPI, (UPPER), VALLEY.

- WINCHELL, N. H., & ULRICH, 1895, (Lower Silurian)

MISSOURI.

- BROADHEAD, (1), 1886, (Geol. Surv.)
BROADHEAD, (2), 1901, (Geol. Surv.)
HAYES, 1911, (Geol. Surv.)
KLEM, 1914, (Hist. Sc. St. Louis)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
MERRILL, G. P., (2), 1920, (State Surv. to 1885)
SAMPSON, 1890, (Bib. Geol.)
SEEVER, 1900, (Mo. Hist. & Phil. Soc.)
WIDMANN, 1907, (Hist. Ornithology)
WINSLOW, 1894, (Hist. Geol. Surv.)
WINSLOW & MARBUT, 1892, (Hist. Geol. Maps)

See also WESTERN STATES; ST. LOUIS.

MISSOURI, (UPPER), REGION.

- NEWTON, 1880, (Hist. Explor.)

MONTANA.

- BLANKINSHIP, 1905, (Bib. & Hist. Bot.)
NEWTON, 1880, (Hist. Explor.)

See also WESTERN STATES.

MOUNT GREYLOCK, see GREYLOCK, MT.

NEBRASKA.

- BARBOUR & FISHER, 1902, (Bib. Geol.)
CLEMENTS, 1894, (Hist. Bot. Explor.)
HAYES, 1911, (Geol. Surv.)
MERRILL, G. P., (1), 1906, (Hist. Geol.)
POUND, 1894, (Bib. Flora)

See also WESTERN STATES.

NEVADA.

See also WESTERN STATES.

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

NEW ENGLAND.

DAY, (1), 1899, (Local Floras)

DAY, (2), 1901, (Herbaria)

HUMPHREY, 1896, (Botanists)

MORSE, A. P., 1920, (Hist. Orthoptera)

See also CONN.; MAINE; MASS.; N. H.; R. I., & VT.

NEW HAMPSHIRE.

BENT, (1), 1911, (Bib. White Mts.)

HASSE, (2), 1907, (Index Econ. Material)

HITCHCOCK, C. H., (1), 1874, (Geol. Surv.)

HITCHCOCK, C. H., (2), 1896, (Hist. Geol.)

JACKSON, 1844, (Hist. Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

See also ATLANTIC COAST; NEW ENGLAND; WHITE MOUNTAINS.

NEW HARMONY, INDIANA.

HOLLIDAY, 1914, (Hist. Sc.)

NEW HAVEN.

BALDWIN, 1901, (Conn. Acad. A. & Sc.)

CENTURY, 1918, (Amer. J. Sc.)

DANA, E. S., 1918, (Amer. J. Sc.)

HERRICK, E. C., 1840, (Conn. Acad. A. & Sc.)

KINGSLEY, W. L., 1879, (Hist. Science at Yale)

LOOMIS, E., 1879, (Conn. Acad. A. & Sc.)

PENFIELD, 1901, (Hist. Yale Miner. Cab.)

NEW JERSEY.

BARNHART, (1), 1915, (Local Floras)

BERRY, (1), 1911, (Hist. Flora Raritan Formation)

BLACK, 1916, (Bib. Geol., Min., Pal.)

CLARK, (4), 1893, (Hist. Cretaceous & Tertiary)

COOK, (1), 1864, (Hist. Geol. Surv.)

COOK, (2), 1885, (Hist. Geol. Surv.)

HASSE, (2), 1915, (Index Econ. Material)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

THOMPSON, 1908, (Learned Soc.)

See also ATLANTIC COAST.

NEW MEXICO.

STANDLEY, 1910, (Bib. Botany)

See WESTERN STATES.

NEW YORK (CITY)

BARNHART, (3), 1917, (N. Y. Acad. Sc.)

BENJAMIN, (2), 1893, (Hist. Sc.)

BROWN, Add., 1909, (Elgin Bot. Gard.)

- FAIRCHILD, 1897, (N. Y. Acad. Sc.)
 GAGER, (1), 1912, (Linnaean Bot. Gard. at Flushing)
 GAGER, (2), 1918, (Brooklyn Bot. Gard.)
 GRAEF, 1914, (Hist. Brooklyn Entomology)
 HOSACK, 1811, (Elgin Bot. Gard.)
 KELBY, 1905, (N. Y. Hist. Soc.)
 RUSBY, 1906, (Hist. Bot.)

See also NEW YORK (STATE).

NEW YORK (STATE).

- BARNHART, (1), 1915, (Local Floras)
 BECK, 1842, (Hist. Mineralogy)
 CLARKE, J. M., (2), 1894, (Bib. Geol. & Pal.)
 DE KAY, (2), 1842, (Hist. Ichthyology)
 DUDLEY, 1886, (Cayuga Co., Hist. Bot.)
 DOW, 1921, (Niagara Falls—Bibliography & History)
 ELLIS, 1903, (Bib. Pub. N. Y. St. Mus., & Nat. Hist. Surv.)
 HALL, James, (2), 1882, (Hist. State Surv.)
 HALL, James, (3), 1883, (Hist. N. Y. State Mus.)
 HASSE, (2), 1907, (Index Econ. Material)
 HAYES, 1911, (Geol. Surv.)
 HOUSE, 1916, (Bib. Bot.)
 LEIGHTON, 1909, (Hist. Geol. Maps)
 LETSON, 1905, (Bib. Mollusca)
 MERRILL, F. J. H., (1), 1898, (Hist. Nat. Hist. Surv.)
 MERRILL, F. J. H., (2), 1902, (Hist. Geol. Surv.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 OSBORN, 1912, (Hist. & Pioneers of Science in N. Y.)
 SEWARD, 1842, (Hist. Nat. Hist.)
 THOMPSON, 1908, (Learned Soc.)
 TORREY, 1843, (Hist. Bot.)

See also ADIRONDACKS; ALBANY; ATLANTIC COAST; BROOKLYN; BUFFALO; CAYUGA COUNTY; LONG ISLAND; NEW YORK (CITY); NIAGARA FALLS; ROCHESTER.

NIAGARA FALLS.

- DOW, 1921, (Bib. & Hist.)

NORTH CAROLINA.

- CLARK & MILLER, 1912, (Va. Coastal Plain Geol.)
 COBB, 1896, (Hist. Sc. at Univ. N. C.)
 HAYES, 1911, (Geol. Surv.)
 HOLMES, (1), 1889, (Hist. Geol. Surv.)
 KERR, 1875, (Geol. Surv.)
 LANEY & WOOD, 1909, (Bib. Geol.)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 PEARSON, 1908, (Hist. Ornithology)
 SMITH, E. A., (2), 1914, (Gulf Coast Geol.—Hist.)

See also ATLANTIC COAST; CHAPEL HILL, N. C.; SOUTHERN STATES.

NORTH DAKOTA.

- HAYES, 1911, (Geol. Surv.)

See WESTERN STATES.

OHIO.

- DERBY & PROSSER, 1906, (Bib. Geol.)
 GRAY, A. F., 1883, (Bib. Conchology)
 HASSE, (2), 1912, (Index Econ. Material)
 HAYES, 1911, (Geol. Surv.)
 JORDAN, (7), 1882, (Bib. Fishes)
 KELLERMAN, 1893, (Bib. Bot.)
 KELLERMAN & WERNER, 1893, (Bib. & Hist. Bot.)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 NEWBERRY, 1873, (Hist. Geol.)
 ORTON, 1894, (Hist. Geol. Surv.)
 VENABLE, 1886, (Hist. & Phil. Soc. Ohio)
 WHEATON, 1882, (Bib. Ornith.)

See also CINCINNATI.

OKLAHOMA.

- HAYES, 1911, (Geol. Surv.)
 TROUT & MYERS, 1915, (Bib. Geol.)

See also WESTERN STATES.

OREGON.

- HEMENWAY, 1904, (Botanists)

See also PACIFIC COAST; WESTERN STATES.

PACIFIC COAST.

- BAIRD, 1855, (Hist. Explorations)
 CARPENTER, 1857, (Hist. Mollusca)
 DALL, (3), 1909, (Hist. Mollusca)
 GILL, 1882, (Bib. Fishes)
 GRINNELL, F., 1914, (Hist. Entomology of Cal.)
 GRINNELL, J., 1909, (Bib. Ornith. Cal.)
 KOHL, 1885, (Hist. Explor.)
 MERRILL, G. P., (1), 1906, (Geol.—Hist.)
 STONE, Witmer, 1916, (Hist. Ornithology)
 WARREN, G. K., 1859, (Hist. Explor.)
 WHEELER, 1889, (Hist. Explor.)

See also CALIFORNIA; OREGON; WASHINGTON (STATE); WESTERN STATES.

PENNSYLVANIA.

- BARNHART, (1), 1915, (Local Floras)
 BURNS, (1), 1919, (Hist. & Bib. Ornith. Chester Co.)
 GORDON, 1922, (Hist. & Bib. Mineralogy)
 HARSHBERGER, (1), 1899, (Hist. Bot. Phila.)
 HASSE, (2), 1919, (Index Econ. Material)
 HAYES, 1911, (Geol. Surv.)
 HUNT, (3), 1878, (Hist. Azoic Rocks S. E. Pa.)
 INGHAM, 1895, (Index Pubs. Surv.)
 LESLEY, (1), 1889, (Dictionary Fossils Pa.)
 LESLEY, (2), 1876, (Geol. Surv. & Hist. Geol.)
 MERRILL, G. P., (1), 1906, (Hist. Geol.)
 MERRILL, G. P., (2), 1920, (State Surv. to 1885)
 PORTER, 1896, (Penn-German in Nat. Sc.)
 STONE, 1908, (Hist. Geol. Surv.)

THOMPSON, 1908, (Learned Soc.)

See also ATLANTIC COAST; LANCASTER, PA.; PHILADELPHIA.

PHILADELPHIA.

COLTON, 1909, (Peale's Mus.)

CRESSON, (1), 1909, (Amer. Ent. Soc.)

DOCK, 1886, (Bartram's Bot. Gard.)

FAXON, 1915, (Relics Peale's Mus.)

HARSHBERGER, (1), 1899, (Botanists, & Hist. Bot.)

HARSHBERGER, (2), 1900, (Botanists)

KINGSLEY, 1882, (Phila. Acad. Nat. Sc.)

LEONARD, 1886, (Botanists)

MORTON, 1841, (Phila. Acad. Nat. Sc.)

NOLAN, (1), 1909, (Phila. Acad. Nat. Sc.)

NOLAN, (2), 1913, (Index to Pub. Phila. Acad.)

PYLE, 1880, (Bartram's Bot. Gard.)

ROTHROCK, 1893, (Hist. Biology at Univ. Pa.)

RUSCHENBERGER, 1852, (Phila. Acad. Nat. Sc.)

SCHARF & WESTON, 1884, (Sc. Soc.)

STONE, W., (2), 1899, (Ornithology)

See also PENNSYLVANIA.

PRINCE GEORGE'S CO., MD.

MILLER, B. L., 1911, (Hist. & Bib. Geol.)

See also MARYLAND.

RHODE ISLAND.

HASSE, (2), 1908, (Index Econ. Material)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

PROVIDENCE FRANKLIN SOC., 1887, (Bib., Geol., Min.)

See also ATLANTIC COAST; NEW ENGLAND.

ROCHESTER, N. Y.

BECKWITH, 1912, (Botanists)

ROCKY MOUNTAINS.

BAIRD, 1855, (Hist. Explor. in the Fifties)

SCHMECKEBIER, 1904, (Bib. Pub. Hayden, King, Powell, & Wheeler, *See v.*)

STONE, Witmer, 1916, (Hist. Western Ornith.)

THWAITES, (1), 1904, (Hist. Explor.)

WARREN, G. K., 1859, (Hist. Explor.)

WHEELER, 1889, (Hist. Explor.)

See also PACIFIC COAST.

ST. LOUIS.

KLEM, 1914, (Hist. Sc.)

SPAULDING, 1908, (Hist. Bot.)

STARR, 1898, (Acad. Sc. St. Louis)

TRELEASE, (2), 1903, (Acad. Sc. St. Louis)

TRELEASE, (3), 1903, (Mo. Bot. Gard.)

WHELPLEY, 1906, (Acad. Sc. St. Louis)

See also MISSOURI.

ST. MARY'S CO., MD.

SHATTUCK, (5), 1907, (Hist. & Bib. Geol.)

See also MARYLAND.

SALEM, MASS.

ESSEX INST., (1), 1898, (First 50 yrs. of E. I.)

ESSEX INST., (2), 1865, (Hist. E. I.)

FOWLER, 1894, (Essex Inst. & Essex Co., Nat. Hist. Soc.)

MORSE, E. S., (1), 1884, (Hist. Zool.)

WHEATLAND, 1856, (Essex Co., Nat. Hist. Soc.)

See also ESSEX COUNTY, MASS.; MASSACHUSETTS.

SOUTH CAROLINA.

BRAGG, (1), 1910, (Bib. Sylva)

BRAGG, (2), 1920, (Hist. Sc.)

GEE, 1918, (Botanists)

HAYES, 1911, (Geol. Surv.)

HOLMES, (2), 1891, (Geol. Surv.)

LOOMIS, 1891, (Hist. Ornith.)

MAZYCK, 1913, (Bib. & Hist. Conchology)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

REA, (3), 1910, (Hist. Ornith.)

SMITH, E. A., (2), 1914, (Hist. Gulf Coast Geol.)

SMALL, 1917, (Botanists)

WAYNE, 1910, (Bib. Ornith.)

See also ATLANTIC COAST; CHARLESTON, S. C.; SOUTHERN STATES.

SOUTH DAKOTA.

TODD, 1894, (Hist. Explor.)

See also BLACK HILLS, S. D.; WESTERN STATES.

SOUTHERN STATES.

SCRIBNER, 1893, (Botanists)

SMITH, E. A., (2), 1914, (Hist. Gulf Coast Geol.)

SPRINGFIELD, MASS.

JOHNSON, 1910, (Mus. Nat. Hist.)

SUPERIOR, LAKE.

IRVING, 1883, (Hist. Copper-Bearing Rocks)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

VAN HISE & LEITH, (2), 1911, (Hist. Geol.)

WADSWORTH, 1880, (Bib. Geol.)

WINCHELL, H. V., 1894, (Hist. Mineralogy)

WINCHELL, N. H., (9), 1895, (Hist. Geol.)

See also MICHIGAN; MINNESOTA; WISCONSIN.

TENNESSEE.

COCKRILL, 1911, (Bib. Geol.)

GLENN, 1912, (Hist. Geol.)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

See also SOUTHERN STATES.

TEXAS.

BUCKLEY, 1874

HILL, 1887, (Hist. Geol. & Geol. Surv.)

MARCOU, Jules, (2), 1894, (Hist. Cretaceous)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

See also SOUTHERN STATES; WESTERN STATES.

UTAH, see WESTERN STATES.

VERMONT.

BARNHART, (4), 1907, (Local Floras)

HASSE, (2), 1907, (Index to Econ. Material)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

PERKINS, (1), 1902, (Bib. Geol. Surv.)

PERKINS, (2), 1904, (Bib. Geol.)

WHITTLE, 1894, (Hist. Geol. Green Mts.)

See also ATLANTIC COAST; NEW ENGLAND.

VIRGINIA.

CLARK & MILLER, 1912, (Geol. Va. Coastal Plain)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

RIVES, 1890, (Bib. & Hist. Ornith.)

TYLER, 1915, (Hist. Sc.)

WATSON, T. L., 1897, (Bib. Geol., Min., Pal.)

See also ATLANTIC COAST; SOUTHERN STATES; WEST VIRGINIA.

WASHINGTON (STATE)

ARNOLD, see O'DONNELL, (Bib. Geol.)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

O'DONNELL, 1913, (Bib. Geol.)

PIPER, 1906, (Hist. & Bib. Bot.)

See also PACIFIC COAST; ROCKY MOUNTAINS; WESTERN STATES.

WASHINGTON, D. C.

BOLTON, (2), 1896, (Smith. Inst.)

COVILLE, 1902, (Early Bot.—Hist.)

GEARE, 1902, (Index Pub. U. S. Nat. Mus.)

GOODE, (5), 1892, (First National Sc. Congress)

GOODE, (6), 1892, (U. S. Nat. Mus.)

GOODE, (7), 1897, (Smith. Inst.)

MC ATEE, 1918, (Hist. & Bib. Nat. Hist.)

NATIONAL ACAD. SC., (2), 1913, (Hist. Nat. Acad. Sc.)

POINSETT, 1841, (Nat. Inst. Prom. Sc.)

RATHBUN, (2), 1917, (Columbian Inst. Prom. A. & Sc.)

RATHBUN, (3), 1905, (U. S. Nat. Mus.)

RATHBUN, (4), 1921, (Nat. Inst. Prom. Sc.)

RHEES, (1), 1901, (Smith. Inst.)

RHEES, (2), 1903, (Index Pub. Smith. Inst.)

RICKER, 1918, (Hist. Bot.)

SAUL, 1907, (Tree culture in D. C.—Hist. of)

VASEY, 1886, (U. S. Nat. Herbarium)

WEST, (THE), see WESTERN STATES.

WEST COAST, see PACIFIC COAST.

WEST VIRGINIA.

BROWN, S. B., 1901, (Bib. Geol.)

HAYES, 1911, (Geol. Surv.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

RIVES, 1890, (Bib. & Hist. Ornith.)

See also VIRGINIA.

WESTERN STATES.

BAIRD, 1855, (Hist. Explor. in the Fifties)

FREMONT, 1887, (Explorations)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

NEWTON, 1880, (Hist. Explor. Upper Missouri Region)

SCHMECKEBIER, 1904, (Cat. Pub. Hayden, Powell, King & Wheeler, Surv.)

STONE, Witmer, 1916, (Hist. Western Ornithology)

THWAITES, (2), 1904, (Early western travels)

WARREN, G. K., 1859, (Hist. Explor.)

WHEELER, 1889, (Hist. Explor.)

See also ROCKY MOUNTAINS.

WHITE MOUNTAINS.

BENT, (1), 1911, (Bibliography)

HITCHCOCK, C. H., (4), 1877, (Hist. Geol.)

PEASE, 1917, (Hist. Bot. Explor.)

STOCKBRIDGE, 1911, (Bib. Geol., Bot., etc.)

UPHAM, 1874, (Hist. Explor.)

See also NEW HAMPSHIRE.

WISCONSIN.

ALDEN, 1918, (Hist. Quaternary Geol., S. E. Wis.)

BLAKE, 1893, (Hist. & Bib. Geol.)

CHENEY, 1901, (Hist. Bot.)

CORY, 1901, (Bib. Ornith.)

HALL, J., (4), 1862, (Hist. Surv.)

HAYES, 1911, (Geol. Surv.)

IRVING, (2), 1892, (Bib. Geol. Penokee Iron District)

MARTIN, L., 1916, (Bib. Reports, etc., Geol.)

MERRILL, G. P., (1), 1906, (Hist. Geol.)

MERRILL, G. P., (2), 1920, (State Surv. to 1885)

WIGHT, 1877, (Hist. Surv.)

See also WESTERN STATES.

WYOMING.

BOVEE, 1918, (Bib. Geol.)

See also WESTERN STATES; ROCKY MOUNTAINS.

A SELECTED BIBLIOGRAPHY OF THE BIOGRAPHIES AND BIBLIOGRAPHIES OF THE PRINCIPAL AMERICAN NATURALISTS OF THE PIONEER CENTURY AND OF COLONIAL TIMES

ABBOT, John. 1750-1840

- 1896 Auk. v. 13, p. 204-15. 1896.
- 1906 Stone, Witmer. Some unpublished letters of Alexander Wilson and J. A. (In Auk. v. 23, p. 361-68. Oct. 1906)
- 1914 N. Y. Entom. Soc. Jour. v. 22, p. 65-72. 1914
- 1918 Rhoads, S. N. Georgia's rarities further discovered in a second American portfolio of J. A.'s Bird Plates. (In Auk. v. 35, p. 271-86. July, 1918)

ABBOTT, Charles Conrad. 1843-1919

- 1887 Pop. Sc. Mthly. v. 30, p. 547-53, port. Feb. 1887.
- 1919 Wright, G. F. C. C. A. (In Science. n. s. v. 50, p. 451-53. Nov. 14, 1919)
- 1920 Auk. v. 37, p. 183-84. Jan. 1920.

ABERT, James William. 1820-1897

- 1886 Appleton's Cycl. Amer. Biog. v. 1, p. 8-9. 1886.
- 1900 Lamb's Biog. Dict. U. S. v. 1, p. 13. 1900.

ABERT, John James. 1788-1862

- 1893 Amer. Soc. Civil Eng. Proc. v. 19, p. 88-92. 1893.

ADAMS, Charles Baker. 1814-1853

- 1853 Amer. J. Sc. ser. 2, v. 15, p. 292-93. 1853.
- 1865 Bland, Thomas. C. B. A. (In Amer. J. Conch. v. 1, no. 3, p. 191-204, port. July 1, 1865)
- 1888 Dall, W. H. C. B. A. (In Biol. Soc. Wash. Proc. v. 4, p. 123-26. 1888)
- 1903 Seely, H. M. C. B. A. (In Amer. Geol. v. 32, p. 1-12, port. 1903)
Contains Bibliography.
- 1904 ——— C. B. A. (In Vermont State Geol. Rept. 1903-4. 1904.
p. 3-15, port.)
Contains Bibliography.

AGASSIZ, Alexander Emmanuel Rudolph. 1835-1910.

- 1910 Mayer, A. G. A. A. (In Pop. Sc. Mthly. v. 77, no. 5, p. 419-46. Nov. 1910)
- Smith. Inst. Ann. Rept. 1910. v. 65, pt. 1, p. 447-72. (By A. G. Mayer)
- 1911 Science. n. s. v. 33, p. 873-87. June 9, 1911. (By John Murray)
- Mus. Comp. Zool. Harvard College. Bull. v. 54, p. 137-58. 1911. (By Sir John Murray)
- 1912 Walcott, H. P. A. A. (In Amer. Acad. A. & Sc. Proc. v. 48, p. 31-44. 1912)
- 1913 Agassiz, G. R. ed. Letters and recollections of A. A. Bost. Houghton, 1913.
7 + 454 p. illus. pl. port. front. map.

AGASSIZ, Jean Louis Rudolphe. 1807-1873

- 1874 Bost. Soc. Nat. Hist. Proc. v. 16, p. 210-11, 211-25, 226-37. 1874. (By Messrs. Bouve, Emerson & Waterston)
 Amer. J. Sc. ser. 3, v. 7, p. 77-80. 1874.
 Pop. Sc. Mthly. v. 4, p. 608-18. Mar. 1874. (By Richard Bliss, Jr.)
 Lyman, Theodore. L. A. (In Amer. Acad. A. & Sc. Proc. v. 9 (n. s. v. 1), p. 310-22. 1874)
 Stebbins, R. P. L. A. (In Smith. Inst. Ann. Rept. for 1873. Wash. 1874. p. 198-210)
- 1875 Cal. Acad. Sc. Proc. v. 5, p. 220-43. 1875.
- 1877 Royal Soc. London. Proc. 1877. v. 25, pref. p. 22-30.
- 1879 Favre, Ernest. L. A. (In Smith. Inst. Ann. Rept. for 1878. Wash. 1879. p. 237-61)
- 1880 Bouve, T. T. L. A. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 154-58)
- 1885 Cornell University, Ithaca, N. Y. Proceedings at the unveiling of a tablet to . . . L. A. 1885. 38 p.
 Agassiz, Elizabeth C[ary]. L. A., his life and correspondence. Bost. 1885. 2v.
 Henshall, J. A. L. A. (In Cincinnati Soc. Nat. Hist. Jour. v. 8, p. 129-44. 1885)
- 1886 Guyot, Arnold. L. A. (In Nat. Acad. Sc. Biogr. Mem. v. 2, p. 39-73. 1886)
 Read April, 1878.
- 1889 Bolton, Mrs. S. K. L. A. (In her Famous men of science. 1889. p. 302-46)
 Gray, Asa. L. A. (In Gray, Asa. Scientific Papers. 1889. v. 2, p. 483-90)
- 1892 Holder, C. F. L. A., his life and work. N. Y., Putnam, 1892. 18 + 327 p. [28 fig.] port.
 Contains Bibliography.
- 1896 Holder, C. F. L. A. (In Jordan, D. S. Science sketches. 1896. p. 133-52)
 Marcou, Jules. Life, letters and works of L. A. N. Y. Macmillan, 1896. 2v. in 1 port. (p. 258-303. Bibliography chronologically arranged.)
 Youmans, W. J. L. A. (In his Pioneers of science in America. 1896. p. 475-91)
- 1897 Science. n. s. v. 5, p. 285-89. Feb. 19, 1897. (By William James)
- 1898 Amer. Nat. v. 32, p. 147-57, port. Mar. 1898.
 Davenport, G. C. A's work on the embryology of the turtle. (In Amer. Nat. v. 32, p. 187-88. Mar. 1898)
 Eastman, C. R. Agassiz's work on fossil fishes. (In Amer. Nat. v. 32, p. 177-85. Mar. 1898)
 Jordan, D. S. A. on recent fishes. (In Amer. Nat. v. 32, p. 173-76. Mar. 1898)
 Packard, A. S., Jr. The philosophical views of A. (In Amer. Nat. v. 32, p. 159-64. Mar. 1898)
 Wright, G. F. A. and the ice age. (In Amer. Nat. v. 32, p. 165-71. Mar. 1898)
- 1899 Amer. Assoc. Adv. Sc. Proc. v. 48, p. 405-7, port. 1899. (By Marcus Benjamin).
 Repr. in Science. n. s. v. 10, p. 630-32. Nov. 3, 1899.
- 1901 Gould, A. B. L. A. Bost. Small, 1901. 18 + 154 p. pl. port. (Beacon Biographies)
- 1907 BROOKLYN INSTITUTE ARTS & SCIENCES. Commemoration of the one hundredth anniversary of the birth of . . . Brooklyn, May 28, 1907. 18 p.
- 1907 Wilder, B. G. What we owe to Agassiz. (In Pop. Sc. Mthly. v. 71, p. 1-20. July, 1907.

See also Harvard Graduates Mag. 1907.

- Morse, E. S. L. A. (In Pop. Sc. Mthly. v. 71, p. 542-49. Dec. 1907)
 Acad. Sc. St. Louis. Trans. v. 17, pref. p. 32-48. 1907. (By John Green)
 Eliot, C. W. Agassiz centennial. (In Amer. Nat. v. 41, p. 413-16. July, 1907)
 Walcott, C. D. L. A. (In Smith. Inst. Misc. Coll. v. 50, p. 216-18, port. 1907).
 1910 Hussakof, Louis. L. A.'s later views on the classification of fishes. (In Science. n. s. v. 32, p. 925-26. 1910)
 1912 Kelly, H. A. L. A. (In his Cycl. Amer. Med. Biog. 1912. v. 1, p. 4-8)
 Repr. in Kelly & Burrage. Amer. Med. Biog. 1920. p. 4-7.
 1913 Nat. Acad. Sc. History, 1863-1913. Wash. 1913. p. 105-9.
 1920 Corson, E. R. A.'s "Essay on classification" fifty years after. (In Scientific Mthly. v. 11, no. 1, p. 43-52. July, 1920)

AKERLEY, Samuel. 1785-1845

- 1901 Goode, G. B. S. A. (In U. S. Nat. Mus. Rept. for 1897. Wash. 1901. pt. 2, p. 424-25)
 1905 Hollick, Arthur. S. A. (In Nat. Sc. Assoc. Staten Island, N. Y. Proc. v. 9, p. 43-5. Apr. 15, 1905)
 "Staten Island's first resident naturalist."

ALDRICH, Charles. 1828-1908

- 1910 Deane, R. C. A. (In Auk. v. 27, p. 119-24, port. 1910)

ALEXANDER, John Henry. 1812-1867

- 1877 Hilgard, J. E. J. H. A. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 213-26. 1877)
 Bibliography, p. 225-26. Rd. April 18, 1872.

ALGER, Francis. 1807-1863

- 1864 Amer. J. Sc. ser. 2, v. 38, p. 449. 1864.
 1865 Amer. Acad. A. & Sc. v. 6, p. 294-96. 1865.
 Jackson, C. T. F. A. (In Bost. Soc. Nat. Hist. Proc. v. 10, p. 2-6. 1865)
 Bibliography, p. 5-6.
 1880 Bouve, T. T. F. A. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 92)

ALLEN, Harrison. 1841-1898

- 1891 Science. v. 18, p. 274-76. 1891.
 1898 Acad. Nat. Sc. Phila. Proc. 1897. Phila. 1898. v. 49, p. 510-15.
 Rhoads, S. N. Dr. A.'s zoological work. Phila. 1898. (In Acad. Nat. Sc. Phila. Proc. 1897. v. 49, p. 518-22).
 Brinton, D. G. Dr. A.'s contributions to anthropology. Phila. 1898. (In Acad. Nat. Sc. Phila. Proc. 1897. v. 49, p. 522-29)
 Wilder, B. G. H. A. (In Science. n. s. v. 7, p. 262-65. 1898)
 1920 Bardeen, C. E. H. A. (In Kelly & Burrage. Amer. Med. Biog. 1920. p. 15-7)
 Also in 1st ed., Kelly, H. A. Cycl. Amer. Med. Biogr. v. 1, p. 12-4.

ALLEN, Joel Asaph. 1838-1921

- 1916 Allen, J. A. Autobiographical notes and a bibliography of J. A. A. N. Y. Amer. Mus. Nat. Hist. 1916. 11 + 215 p. port.
 1921 Nat. Hist. v. 21, p. 513-19, port. 1921. (Osborn & Chapman)

ANDREWS, Ebenezer Baldwin. 1821-1880

- 1806 Merrill, G. P. E. B. A. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 690)

ANTHONY, John Gould. 1804-1877

- 1888 Dall, W. H. J. G. A. (In Biol. Soc. Wash. Proc. v. 4, p. 111-12. 1888)
1909 Nat. Cycl. Amer. Biog. v. 10, p. 404-5. 1909.

ANTISELL, Thomas. 1817-1893

- 1896 Phil. Soc. Wash. Bull. v. 13, p. 367-70. 1896. (By W. H. Seamans)
1906 Merrill, G. P. T. A. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 453-55)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 32-3.
Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 26-7.

ASHTON, Thomas B. 1826-1895

- 1896 Entomological News. v. 7, p. 96. Mar. 1896.

ATWATER, Caleb. 1778-1867

- 1905 Martzloff, C. L. C. A. (In Ohio Archaeol. & Hist. Quart. v. 14, p. 247-71. 1905)

ATWOOD, Nathaniel Ellis. 1807-1886

- 1886 Bost. Soc. Nat. Hist. Proc. v. 23, p. 337-38. 1886.
1888 Amer. Acad. A. & Sc. Proc. v. 22, p. 522-23. 1888.

AUDUBON, John James Laforest. 1780-1851

- 1834 Dunlap, William. J. J. A. (In his History of the rise and progress of the arts in U. S. 1834. v. 2, p. 403-8)
Repr. in new ed., 1918. v. 3, p. 202-9.
1856 St. John, Mrs. Horace. A., the naturalist of the new world: his adventures and discoveries. Lond. 1856. 14 + 172 p.
1st Amer. ed., Bost. 1856. 24 + 312 p. Other ed., 1861, 1864, 1870, 1876.
1868 Buchanan, Robert. Life and adventures of A., the naturalist. Lond. 1868. 8 + 366 p.
Repr. in 1913, see below.
1880 Coues, Elliott. Behind the veil (letters by A., and MacGillivray). (In Nuttall Ornith. Club. Bull. v. 5, p. 193-204. 1880)
1886 Shufeldt, R. W. An old portrait of A., painted by himself, and a word about some of his (early) drawings. (In Auk. v. 3, p. 417-20. Oct. 1886)
1887 Pop. Sc. Mthly. v. 31, p. 687-97, port. Sept. 1887.
1889 Bolton, Mrs. S. K. A. (In her Famous men of science. 1889. p. 167-201)
1893 Audubon, M. R. A.'s story of his youth. (In Scribner's Mag. v. 13, p. 267-87, illus. 1893)
Allen, J. J. A., and his Journals. (In Auk. v. 15, p. 198-205. 1893)
1894 Elliot, D. G. J. J. A. (In N. Y. Acad. Sc. Trans. v. 13, p. 43-69. 1894)
1896 Youmans, W. J. J. J. A. (In his Pioneers of science in America. 1896. p. 152-66)
1897 Audubon, M. R. A., and his Journals; ed. by M. R. A., with notes by Elliott Coues. 1897. 2 v.
1898 Merriam, C. H. A., and his Journals. (In Science. n. s. v. 7, p. 289-96. Mar. 4, 1898)
Swainson, William. Letter to J. J. A. (In Auk. v. 15, p. 11-3. Jan. 1898)

- 1900 Gill, T. N. J. J. A. (In Osprey. v. 2, p. 95-9. Apr. 1898 & v. 5, p. 23-5. Dec. 1900)
- 1902 Burroughs, John. J. J. A. Bost. 1902. 17 + 144 p.
- 1902 Audubon, Lucy. The life of J. J. A., the naturalist; edited by his widow, with an introduction by J. G. Wilson. N. Y. Putnam, 1902. 443 p. port.
- 1903 Rhoads, S. N. Auduboniana. (In Auk. v. 20, p. 377-83. Oct. 1903)
- 1904 Deane, Ruthven. Unpublished letters of J. J. A. and S. F. Baird. (In Auk. v. 21, p. 255-59. Apr. 1904)
- Extracts from an unpublished Journal of J. J. A. (In Auk. v. 21, p. 334-38. July, 1904)
- 1905 Swainson, William, and Abert, J. J. Letters to J. J. A. (hitherto unpublished). (In Ank. v. 22, p. 31-4, 170-71, 172-75. Jan. & Apr. 1905)
- 1906 Stone, Witmer. A bibliography and nomenclator of the ornithological works of J. J. A. (In Auk. v. 23, p. 298-312. July, 1906)
- Deane, Ruthven. Unpublished letters of J. J. A. and S. F. Baird. (In Auk. v. 23, p. 194-209, 318-34. Apr. & July, 1906)
- Cont. in v. 24, p. 53-70. Jan. 1907.
- 1908 Deane, Ruthven. Unpublished letters of J. J. A. (In Auk. v. 25, p. 166-73. Apr. 1908)
- p. 166-69, To his family; p. 170-73. Letters of Introduction carried on his Missouri River Expedition.
- 1909 Burns, F. L. A letter from A. to (Richard) Harlan, describing a new species (*Polyborus cheriwayi*). (In Wilson Bull., Oberlin, Ohio. v. 21, p. 103-4. 1909)
- Merritt, D. L. A., the ornithologist in Kentucky. Nashville, 1909. (In Taylor-Trotwood Mag. v. 10, p. 293-98)
- 1910 Deane, Ruthven. A's Labrador trip of 1833. (In Auk. v. 27, p. 42-52. 1910)
- Stone, Witmer. J. J. A. (In Jordan, D. S. Leading American men of science. 1910. p. 71-87)
- Shufeldt, R. W. An hitherto unpublished painting by A. (In Wilson Bull., Oberlin, Ohio. v. 22, p. 1-3. Mar. 1910)
- 1911 Bakewell, Gordon. Reminiscences of J. J. A. (In Louisiana Hist. Soc. Publications. v. 5, p. 31-41. 1911)
- 1913 Buchanan, Robert. Life and adventures of A., the naturalist. 1913
- First published in 1868. In Everyman's Library ed., 20 + 335 p.
- 1916 Grinnell, G. B. Some Audubon letters. (In Auk. v. 33, p. 119-30. Apr. 1916).
- Rhoads, S. N. More light on A.'s folio "Birds of America." (In Auk. v. 33, p. 130-32. Apr. 1916)
- Thayer, J. E. Auduboniana. (In Ank. v. 33, p. 115-18. Apr. 1916)
- 1917 Auk. v. 34, p. 239-40. 1917.
- A description of Audubon, repr. from the Middletown, Conn., "Sentinel & Witness," for Sept. 6, 1843; & the Buffalo "Courier," for Aug. 22, 1843.
- Herrick, Francis Hobart. Audubon the naturalist; a history of his life and time. N. Y. D. Appleton, 1917. 2 v. illus. pl. port. facsim.
- v. 1, 40 + 451 p.; v. 2, 13 + 494 p.
- Bibliography of A., v. 2, p. 401-56.
- 1918 Harris, Harry. Uncolored prints from Havell's engravings of A.'s "Birds of America." (In Auk. v. 35, p. 29-32, 2 pl. Jan. 1918)
- 1919 Herrick, F. H. A's bibliography. (In Auk. v. 36, p. 372-80. July, 1919)

AUDUBON, John Woodhouse. 1812-1862

- 1906 Audubon, J. W. Audubon's Western Journal: 1849-1850; being the MSS record of a trip from New York to Texas, and an overland journey through Mexico and Arizona to the gold-fields of California . . . with a biographical memoir by his daughter, M. R. Audubon; introduction, notes and index by K. H. Hodder . . . Cleveland, Clark, 1906. 249 p. port.

Biography, p. 21-38.

- 1920 Grinnell, G. B. Recollections of Audubon Park. (In *Auk*. v. 37, p. 372-80. July, 1920)

AUSTIN, Coe Finch. 1831-1880

- 1918 Demarest, Sarah Austin. C. F. A. (In *Torrey Bot. Club. Mem.* v. 17, p. 31. June 10, 1918)

AYRES, William. 1817-1891**BACHE, Alexander Dallas. 1806-1867**

- 1877 Henry, Joseph. A. D. B. (In *Nat. Acad. Sc. Biogr. Mem.* v. 1, p. 181-212d. 1877)

Bibliography, p. 205-12d. Read April 16, 1869.

BACHMAN, John. 1790-1874

- 1874 Amer. Acad. A. & Sc. Proc. v. 9, p. 330-31. 1874.

- 1888 Letters, and memories of his life. Charleston, S. C., 1888. 436 p. port.

BACON, John, Jr. 1817-1881

- 1883 Amer. Acad. A. & Sc. Proc. 1883. v. 18, p. 419-22.

Bibliography, p. 421-22.

BAILEY, Jacob Whitman. 1811-1857

- 1857 Amer. J. Sc. ser. 2, v. 23, p. 447-48. 1857.

Bost. Soc. Nat. Hist. Proc. v. 6, p. 173-74. 1857.

- 1858 Amer. Assoc. Adv. Sc. Proc. v. 11, p. 1-8. 1858. (By A. A. Gould).

Read Aug. 19, 1857.

- 1885 MARCOU, Jules. The writings of J. W. B. Wash. 1885. (In *U. S. Nat. Mus. Bull.* 30, p. 203, 273)

- 1888 Coulter, Stanley. J. W. B. (In *Bot. Gaz.* v. 13, p. 118-24. 1888)

- 1899 Benjamin, Marcus. J. W. B. (In *Amer. Assoc. Adv. Sc. Proc.* v. 48, p. 418-19, port. 1899)

Repr. in *Science*. n. s. v. 10, p. 672-73. Nov. 10, 1899.

BAIRD, Spencer Fullerton. 1823-1887

- 1883 Goode, G. B. The published writings of S. F. B., 1843-1882. Wash. 1883. 16 + 377 p. (In *U. S. Nat. Mus. Bull.* 20)

Biographical sketch, pref. p. 3-12.

- 1887 Amer. J. Sc. ser. 3, v. 34, p. 319-22. 1887.

Phil. Soc. Wash. Bull. v. 10, p. 41-77, port. 1887.

- 1888 *Pop. Sc. Mthly.* v. 33, p. 547-55, port. Aug. 1888.

Ridgway, Robert. S. F. B. (In *Auk*. v. 5, no. 1, p. 1-14. Jan. 1888).

Rd. before 5th meeting of A. O. U.

Amer. Acad. A. & Sc. Proc. v. 23, p. 347-48. 1888.

Bost. Soc. Nat. Hist. Proc. v. 23, p. 558-65. Apr. 1888. (By Alpheus Hyatt)

- 1890 Smith. Inst. Ann. Rept. for 1888. Wash. 1890. p. 77-89.
 See also, p. 703-44. (see below, art. by Ridgway, Taylor & Dall). p. 739-44, by J. W. Powell, on Baird's personality.
 Ridgway, R. S. S. F. B. (In Smith. Inst. Ann. Rept. for 1888. Wash. 1890. v. 43, pt. 1, p. 703-13)
 Taylor, W. B. Prof. Baird as an administrator. (In Smith. Inst. Ann. Rept. for 1888. Wash. 1890. v. 43, pt. 1, p. 721-29).
 Dall, W. H. S. F. B. in science. (In Smith. Inst. Ann. Rept. for 1888. Wash. 1890. v. 43, pt. 1, p. 731-38)
- 1895 Billings, J. S. S. F. B. (In Nat. Acad. Sc. Biogr. Mem. v. 3, p. 141-60. 1895)
 Rd. April 17, 1889.
- 1897 Goode, G. B. S. F. B. (In his *The Smithsonian Institution: History of its first half-century; 1846-1896.* Wash. 1897. p. 157-200, port.)
 The three Secretaries.
- 1904 Deane, Ruthven. Unpublished letters of John James Audubon and S. F. B. (In Auk. v. 21, p. 255-59. Apr. 1904)
- 1906 Cockerell, T. D. A. S. F. B. (In Pop. Sc. Mthly. v. 68, p. 63-83. Jan. 1906)
 Deane, Ruthven. Unpublished letters of John James Audubon and S. F. B. (In Auk. v. 23, p. 194-209, 318-34. Apr. & July, 1906)
 Cont. in v. 24, p. 53-70. Jan. 1907.
- 1910 Holder, C. F. S. F. B. (In Jordan, D. S. *Leading American men of science.* 1910. p. 269-81)
- 1915 DALL, W. H. S. F. B.: a biography, including selections from his correspondence with Audubon, Agassiz, Dana, and others. Phila. Lippincott, 1915. 16 + 462 p. illus. pl. port.
- 1918 Linton, Edwin. The man of science and the public: an appreciation of S. F. B. (In Science. n. s. v. 48, p. 25-34. 1918)
- 1923 Dall, W. H. Baird, the man. (In Science. n. s. v. 57, p. 194-96. Feb. 16, 1923).
 Centennial memorial address.

BALDWIN, William. 1779-1819

- 1843 Darlington, William. *Reliquiae Baldwinianae.* Phila. 1843. 346 p. port.
 1883 Bot. Gaz. v. 8, no. 6, p. 233-37. June, 1883.
 1899 Harshberger, John. W. B. (In his *Botanists of Phila.* 1899. p. 119-25)
 1908 Pop. Sc. Mthly. v. 73, p. 495-97. Dec. 1908. (Spaulding)
 1914 Kelly, H. A. W. B. (In his *Some American medical botanists.* 1914. p. 104-12, port.)

BANISTER, John. -1693

- 1806 Barton, B. S. J. B. (In Phila. Med. & Phys. Jour. v. 2, pt. 2, p. 134-39. Sept. 1806)
 1886 Goode, G. B. J. B. (In Biol. Soc. Wash. Proc. v. 3, p. 75-6. 1886). Repr. in U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, p. 385-86. 1901.
 1897 Nat. Cycl. Amer. Biog. v. 7, p. 504. 1897.

BARNES, Daniel Henry. 1785-1828

- 1829 Amer. J. Sc. ser. 1, v. 15, p. 401-2. 1829.
 1887 Fairchild, H. L. D. H. B. (In his *Hist. N. Y. Acad. Sc. N. Y.* 1887. p. 94-6)

BARRETT, Joseph. 1796-1882

- 1901 Sargent, C. S. J. B. (In his *Silva N. A.* v. 14, p. 64. 1901).
 1921 Weatherby, C. A. Old-time Connecticut botanists and their herbaria—II: Joseph Barratt. (In *Rhodora.* v. 23, p. 121-25, 171-77, 301. June-July, 1921)

BARTON, Benjamin Smith. 1766-1815

- 1816 Barton, W. P. C. B. S. B. Phila. 1816. 34 p.
 Rd. before Phila. Med. Soc. in 1816. Also in the *Portfolio.* v. 1, no. 4. Apr. 1816.
 1896 *Pop. Sc. Mthly.* v. 48, p. 834-40, port. Aug. 1896.
 Repr. in Youmans, W. J. *Pioneers of science in America.* 1896. p. 81-9.
 1899 Harshberger, John. B. S. B. (In his *Botanists of Philadelphia.* 1899. p. 108-13)
 1900 Lloyd Library. Reproduction series. Bull no. 1. Cincinnati, 1900.
 1905 Stone, Witmer. B. S. B. (In *Bird-Lore.* 1905. v. 7, p. 193-94, port.)
 1914 Kelly, H. A. B. S. B. (In his *Some American medical botanists.* Troy, N. Y., 1914. p. 88-96, port.)
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 68-9.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 54-5.

BARTON, William Paul Crillon. 1786-1856

- 1860 *Gardener's Mthly.* v. 2, p. 293-94. 1860.
 1899 Harshberger, John. W. P. C. B. (In his *Botanists of Philadelphia.* 1899. p. 159-63)
 1906 *Nat. Cycl. Amer. Biog.* v. 13, p. 279. 1906.
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 70.
 Also in Kelly & Burrage. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 55-6.

BARTRAM, John. 1699-1777

- 1804 Bartram, William. J. B. (In *Phila. Med. & Phys. Jour.* v. 1, pt. 1, p. 115-24. Nov. 13, 1804).
 1849 Darlington, William. *Memorials of J. B. and Humphry Marshall.* 1849.
 Bartram, p. 7-478.
 Rev. in *Amer. J. Sc.* ser. 2, v. 9, p. 85-105. 1850.
 1860 *Gardener's Mthly.* 1860. v. 2, p. 271-73, port.
 1880 Pyle, Howard. Bartram and his garden. (In *Harper's Mag.* v. 60, p. 321-30, illus. Feb. 1880)
 1892 *Pop. Sc. Mthly.* v. 40, p. 827-39. Apr. 1892.
 1896 Youmans, W. J. J. B. (In *His Pioneers of science in America.* 1896. p. 24-39).
 1899 Harshberger, John. J. B. (In his *Botanists of Phila.* 1899. p. 46-76)
 1914 Kelly, H. A. J. B. (In his *Some American medical botanists.* 1914. p. 49-59)
 1915 Fox, R. H. J. B. (In *Friends' Quart. Examiner.* Apr. 1915).
 1919 Fox, R. H. J. B. (In Fox, R. H. *John Fothergill.* London. 1919. p. 159-73)

BARTRAM, William. 1739-1823

- 1892 *Pop. Sc. Mthly.* v. 40, p. 827-39. Apr. 1892.
 1896 Youmans, W. J. W. P. C. B. (In his *Pioneers of science in America.* 1896. p. 24-39).

- 1899 Harshberger, John. W. B. (In his *Botanists of Phila.* 1899. p. 86-8)
 1905 Stone, Witmer. W. B. (In *Bird-Lore.* 1905. v. 7, p. 162-64)
 1906 Morris, G. S. W. B. (In *Cassinia.* v. 10, p. 1-9, pl. port. 1906)
 1913 Stone, Witmer. Bird migration records of William Bartram, 1802-1822. (In *Auk.* v. 30, no. 3, p. 325-58, 2 pl. July, 1913)
 1918 Gee, Wilson. W. B. (In *Univ. S. C. Bull.* no. 72. p. 17-9. Sept. 1918)

BASSETT, Homer Franklin. 1826-1902

- 1896 *Nat. Cycl. Amer. Biog.* v. 6, p. 481, port. 1896.

BEAUMONT, John F. 1825-1865

- 1886 Peters, T. M. Sketch of J. F. B. (In *Jour. Mycology.* v. 2, no. 7, p. 81-3. July, 1886)

***BEAUVOIS, see *PALISOT DE BEAUVOIS.**

BEBB, Michael Schneck. 1833-1895

- 1896 Parish, S. B. Biographical sketch of M. S. B. Berkeley, Cal., Jan. 1896.
 (In *Erythea.* v. 45, no. 2, p. 29-31).
 Deane, Walter. M. S. B. (In *Bot. Gaz.* v. 21, p. 53-66. Feb. 1896)
Bibliography, p. 65-6.

BECK, John Brodhead. 1794-1851

- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 86.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 72-3.

BECK, Lewis Caleb. 1798-1853

- 1853 *Amer. J. Sc.* ser. 2, v. 16, p. 149-50. 1853.
 1861 March, Alden. L. C. B. (In *Gross' Amer. Med. Biog.* 1861. p. 679-96)
 1870 Albany Inst. Proc. 1870. v. 6, p. 275-76.
 1908 *Pop. Sc. Mthly.* v. 73, p. 498-99. Dec. 1908 (Spaulding)
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 87.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 73.

BECK, Theodore Romeyn. 1791-1855

- 1907 *Nat. Cycl. Amer. Biog.* v. 9, p. 350-51. 1907.
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 87-8.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* v. 1, p. 73-4.

BEHR, Hans Herman. 1818-1904

- 1904 Gutzkow, F., and others. H. H. B. San Francisco, California Acad. Sc.
 1904. 7 p. port.
Rd. Mar. 21, 1904.
Entomological News. v. 15, p. 142-44. Apr. 1904.
 Eastwood, Alice. H. H. B. (In *Science.* n. s. v. 19, p. 636. Apr. 15, 1904)

BELL, John G. 1812-1889

- 1890 *Auk.* v. 7, p. 98-9. Jan. 1890.

BENDIRE, Charles Emil. 1836-1897

- 1897 *Auk.* v. 14, p. 253. Apr. 1897.
 1902 Irwin, B. J. D. C. E. B. (In *Auk.* v. 19, p. 116-17. Jan. 1902)

***BERKELEY, Miles Joseph. 1803-1889**

1890 Royal Sc. London. Proc. 1890. v. 47, pref. p. 3-12.

1913 Oliver, F. W. M. J. B. (In *Makers of British botany*. 1913. p. 226-32)
Written by George Massee.

BERLANDIER, Luis. -1851

1855 Smith. Inst. 9th Ann. Rept. for 1854. p. 15.

1891 Sargent's Silva N. A. v. 1, p. 82. 1891.

BEST, Robert. 1790-1830

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 96.

Also in Kelly, Cycl. Amer. Med. Biog. 1912. v. 1, p. 81-2.

BICKMORE, Albert Smith. 1839-1914

1900 Nat. Cycl. Amer. Biog. v. 8, p. 268-69.

BIGELOW, Jacob. 1787-1879

1879 Amer. J. Sc. ser. 3, v. 17, p. 263-66. 1879.

Amer. Acad. A. & Sc. Proc. 1879. v. 14, p. 333-42.

1880 Ellis, G. E. Memoir of J. B. Cambridge, 1880. 105 p. port.

1883 Bailey, L. H., Jr. J. B. (In Bot. Gaz. v. 8, no. 5, p. 217-22. May, 1883)

1889 Gray, Asa. J. B. (In his Scientific papers. v. 2, p. 413-16. 1889)

1914 Kelly, H. A. J. B. (In his Some American medical botanists. 1914.
p. 120-28, port.)

BIGELOW, John Milton. 1804-1878

1878 Atkinson's Physicians & Surgeons U. S. 1878. p. 285.

1891. Sargent's Silva N. A. 1891. v. 1, p. 88.

***BIGSBY, John Jeremiah. 1792-1881**

1881 Geol. Soc. London. Quart. Jour. v. 37, p. 39-41. 1881.

Amer. J. Sc. ser. 3, v. 21, p. 338. 1881.

1882 Royal Soc. London. Proc. 1882. v. 33, pref. p. 16-7.

***BILLINGS, Elkanah. 1820-1876**

1877 Amer. J. Sc. ser. 3, v. 14, p. 78-80. 1877.

1901 Ami, H. M. E. B. (In Amer. Geol. v. 27, p. 265-81, port. 1901)

Bibliography, p. 272-81.

BINNEY, Amos. 1803-1847

1851 Gould, A. A. A. B. (In Binney's Terrestrial air-breathing Mollusks U. S.
1851. v. 1, pref. p. 11-29)

1880 Bouve, T. T. A. B. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 46-8,
port.)

See also Proc. v. 6, p. 89-90. 1856.

1888 Dall, W. H. A. B. (In Biol. Soc. Wash. Proc. v. 4, p. 122-23. 1888)

1907 Nat. Cycl. Amer. Biog. v. 7, p. 510-11. 1907.

BLAKE, Charles Alfred

1903 Entomological News. v. 14, p. 212-15, port. 1903.

BLAKE, William Phipps. 1826-1910

1910 Amer. Inst. Mining Eng. Trans. v. 41, p. 851-64. 1910. (By R. W.
Raymond)

Bibliography, p. 857-64.

Repr. in Geol. Soc. America. Bull. v. 22, p. 36-48, port. 1911.

BLAND, James H. B. 1832-1911

1911 Entomological News. v. 23, p. 47, port. Jan. 1911.

BLAND, Thomas. 1809-1885

1885 Amer. J. Sc. ser. 3, v. 30, p. 407-8. 1885.

1886 N. Y. Acad. Sc. Trans. v. 5, p. 278-80. 1886.

Amer. Nat. v. 20, p. 316-17. 1886.

Port. of Bland is in Amer. J. Conch. v. 2, p. 4. 1866.

1887 Fairchild, H. L. T. B. (In his Hist. N. Y. Acad. Sc. 1887. p. 93-4)

1888 Dall, W. H. T. B. (In Biol. Soc. Wash. Proc. v. 4, p. 127-29. 1888)

BLANDY, John Frederic. 1833-1903

1903 Raymond, R. W. J. F. B. (In Amer. Inst. Mining Eng. Trans. v. 34, p. 740-42. 1903)

BLANEY, James Van Zandt. 1820-1874

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 112-13.

Also in Kelly, H. A. Cycl. Amer. Med. Biog.

BLODGETT, John Loomis. 1809-1853

1891 Sargent, C. S. J. L. B. (In his Silva N. A. v. 1, p. 33-4. 1891)

BOARDMAN, George A. 1818-1901

1901 Auk. v. 18, p. 219-20. Apr. 1901.

BODLEY, Rachel Littler. 1831-1888

1899 Harshberger, John. R. L. B. (In his Botanists of Phila. 1899. p. 283-85)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 117.

BOLANDER, Henry Nicholas. 1831-1897

1898 Jepson, W. L. Dr. H. N. B., botanical explorer. Berkeley, Cal., Oct. 1898.
(In Erythea. v. 6, no. 10, p. 100-7, port.)

BONAPARTE, Charles Lucien Jules Laurent. 1803-1857

1905 Emerson, W. O. A MS. of C. L. J. L. B. (In Condor. v. 7, p. 46-7, port. March, 1905)

Trotter, Spencer. C. L. J. L. B. (In Cassinia. v. 9, p. 1-5, port. 1905)

1909 Davois, Gustave. C. L. J. L. B. Paris, 1909. (In his Les Bonapartes litterateurs. p. 9-10)

BOOTH, Charles M. 1830-1906

1912 Beekwith, F. M. C. M. B. (In Rochester Acad. Sc. Proc. v. 5, p. 51-5. Feb. 1912)

BOOTH, James Curtis. 1810-1888

1888 Amer. Phil. Soc. Proc. 1888. v. 25, p. 204-11. (By Davois Patterson).

1891 Pop. Sc. Mthly. v. 40, p. 116-22, port. Nov. 1891.

BOOTT, Francis. 1792-1863

1864 Amer. J. Sc. ser. 2, v. 37, p. 288-92. 1864.

1865 Amer. Acad. A. & Sc. Proc. v. 6, p. 305-8. 1865.

1889 Gray, Asa. F. B. (In his Scientific Papers. v. 2, p. 315-20. 1889).

BOUVE, Thomas Tracy. 1815-1896

- 1897 Amer. Acad. A. & Sc. Proc. 1897. v. 32, p. 340-44.
 Sprague, C. J. Memorial of T. T. B. (In Bost. Soc. Nat. Hist. Proc. v. 27, p. 225-27. 1897)

See also p. 227-41, for notes by Hyatt & Crosby.

White, J. C. T. T. B. (In Bost. Soc. Nat. Hist. Proc. v. 27, p. 219-24. 1897).

Nat. Cycl. Amer. Biog. v. 7, p. 506-7. 1897.

BOWEN, George Thomas. 1800-1828

- 1829 Amer. J. Sc. ser. 1, v. 15, p. 403-4. 1829.
 1904 Nat. Cycl. Amer. Biog. v. 12, p. 108. 1907.

BOYE, Martin Hans. 1812-1909

- 1896 Scientific American. v. 74, p. 430, port. Dec. 12, 1896.
 1909 Science. n. s. v. 29, p. 448-49. Mar. 19, 1909.

BRACE, John Pierce. 1793-1872

- 1891 Appleton's Cycl. Amer. Biog. v. 1, p. 344. 1891.
 1904 Weatherby, C. A. Old-time Connecticut botanists and their herbaria: J. P. B. Bost. 1904. (In Rhodora. v. 16, p. 83-90)

BRACKENRIDGE, William D. 1810-1893

- 1884 Meehan, Thomas. W. D. B. (In Gardener's Mthly. v. 26, p. 375-76, port. Dec. 1884).
 1919 Barnhart, J. H. Brackenridge and his book on ferns. (In N. Y. Bot. Gard. Jour. v. 20, p. 117-24. June, 1919)

***BRADBURY, John. 1768-1823**

- 1908 Pop. Sc. Mthly. v. 73, p. 493-95. Dec. 1908 (Spaulding)

BRADFORD, George W. 1796-1883

- 1884 Med. Soc. N. Y. Trans. 1884. p. 394-400.

BRADLEY, Frank Howe. 1838-1879

- 1879 Amer. J. Sc. ser. 3, v. 17, p. 415-16. 1879.

BRADLEY, Samuel Beach. 1796-1880

- 1912 Beckwith, F. M. S. B. B. (In Rochester Acad. Sc. Proc. v. 5, p. 39-41. Feb. 1912)

BREVOORT, James Carson. 1818-1887

- 1888 N. Y. Acad. Sc. Trans. v. 7, p. 78-80. 1887-88.
 1891 Appleton's Cycl. Amer. Biog. v. 1, p. 369. 1891.

BREWER, Thomas Mayo. 1814-1880

- 1880 Amer. Nat. v. 14, p. 229-30.
 Auk. v. 5, p. 102-4. Apr. 1880.
 Amer. Acad. A. & Sc. Proc. v. 15, p. 378-80.
 Bouve, T. T. T. M. B. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 209-11).
 1881 Smith. Inst. Ann. Rept. for 1880. 1881. p. 66-7.
 Bost. Soc. Nat. Hist. Proc. v. 20, p. 411-13 (By Bouve)
 See also p. 413-15, by J. A. Allen.

BREWER, William Henry. 1828-19101906 *Nat. Cycl. Amer. Biog.* v. 13, p. 561, port. 1906.1911 Jenkins, E. H. *W. H. B.* (In *Amer. J. Sc.* ser. 4, v. 31, p. 71-4. Jan. 1911)**BRICKELL, John. (American) 1749-1809**1916 Robinson, B. L. *The Doctors Brickell.* (In *Rhodora.* v. 18, no. 215, p. 225-30. Nov. 1916)1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 142.**BRICKELL, John. (English) 1710-1745?**

1916 See preceding under Robinson, B. L.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920, p. 141-42.**BRIDGES, Robert. 1806-1882**1883 *Acad. Nat. Sc. Phila. Proc.* 1882. v. 33, p. 226-30. (By W. S. W. Ruschenberger)1884 Ruschenberger, W. S. W. *R. B.* (In *Amer. Phil. Soc. Proc.* 1884. v. 21, p. 427-47).1899 Harshberger, John. *R. B. Phila.* 1899. (In his *Botanists of Phila.* p. 195-96).1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 142-43.**BRIGGS, Caleb, Jr. 1812-1884**1885 Whittlesey, Charles. C. B., Jr. (In *Mag. Western Hist.* v. 2, p. 73-87, port. May, 1885).**BRINCKLE, William Draper. 1798-1872**1863 Gardette, E. B. *W. D. B. Phila.* 1863.1888 Scharf, J. T. *W. D. B.* (In his *History of Delaware.* v. 1, p. 488-89. 1888)**BRINTON, Daniel Garrison. 1837-1899**1899 *Science.* n. s. v. 10, p. 193-96, port.1900 *Amer. Phila. Soc. Proc. Memorial.* v. 1, p. 210-72, port. (Brinton Memorial Meeting. *Bibliography*, p. 247-72)**BRINTON, Jeremiah Bernard. 1835-1894**1895 *Torrey Bot. Club. Bull.* v. 22, p. 93-7, port. 1895.1899 Harshberger, John. *J. B. B.* (In his *Botanists of Phila.* 1899. p. 294-98)**BROADHEAD, Garland Carr. 1827-1912**1898 Starr, Frederick. *G. C. B.* (In *Pop. Sc. Mthly.* v. 52, p. 635-36. Mar. 1898)1919 Keyes, C. R. *G. C. B.* (In *Geol. Soc. Amer. Bull.* v. 30, p. 13-27. 1919)*Bibliography*, p. 20-7.**BROCKLESBY, John. 1811-1889**1904 *Nat. Cycl. Amer. Biog.* v. 12, p. 287. 1904.**BROOKS, Thomas Benton. 1836-1900**1901 Willis, Bailey. *T. B. B.* (In *Science.* n. s. v. 13, p. 460-62. Mar. 22, 1901)1906 Merrill, G. P. *T. B. B.* (In *U. S. Nat. Mus. Ann. Rept.* 1904. Wash. 1906. p. 536-38)**BROWN, Samuel. 1769-1830**1898 *Nat. Cycl. Amer. Biog.* v. 4, p. 348-49. 1898.

- 1917 Peter, Robert. S. B. (In Ky. Med. Jour. v. 15, appx. p. 53-4, port. Nov. 1. 1917).
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 154-55.
Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 118-19.

BROWNNE, Francis C. 1830-1900

- 1900 Adams, Z. B. F. C. B. (In Auk. v. 17, p. 194-96. Apr. 1900)

BROWNNE, Robert H. 1810-1879

- 1887 Fairchild, H. L. R. H. B. (In his Hist. N. Y. Acad. Sc. 1887. p. 73-6, port.)

BRUCE, Archibald. 1777-1818

- 1819 Amer. J. Sc. ser. 1, v. 1, p. 299-304, port. March, 1819.
1883 Amer. Assoc. Adv. Sc. Proc. 1883. v. 31, p. 4-6. (By G. J. Brush)
1907 Nat. Cycl. Amer. Biog. v. 9, p. 356, port. 1907.
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 158.

BRUSH, George Jarvis. 1831-1912

- 1881 Pop. Sc. Mthly. v. 20, p. 117-21. Nov. 1881. (By T. R. Lounsbury)
1906 Yale Sc. Mthly. v. 12, p. 245-48, port. 1906.
1912 Amer. J. Sc. ser. 4, v. 33, p. 389-96. 1912. (By E. S. Dana)
Science. n. s. v. 35, p. 409-11. 1912. (By W. E. Ford)
Yale Sc. Mthly. v. 18, p. 298-302, port. 1912.
1916 Warren, C. H. G. J. (In Amer. Acad. A. & Sc. Proc. v. 51, p. 853-57. 1916)

BRYANT, Henry. 1820-1867

- 1868 Amer. Acad. A. & Sc. Proc. v. 7, p. 304-5. 1868.
Bost. Soc. Nat. Hist. Proc. v. 11, p. 205-15. (By S. L. Abbot)
Abstr. in Anniv. Mem. 1880. p. 117.
Bibliography, p. 213-15.

BUCHANAN, Robert. 1797-1879

- 1880 Graham, George. R. B. (In Cincinnati Soc. Nat. Hist. Jour. v. 3, p. 74. 1880)

BUCKLEY, Samuel Botsford. 1809-1884

- 1883 Bibliography. (In Alumni Record, Wesleyan Univ. 1883)
1884 Wright, S. H. S. B. B. (In Torrey Bot. Club. Bull. v. 11, p. 46. 1884)
1907 Nat. Cycl. Amer. Biog. v. 5, p. 23. 1907.

BUDD, Bern W.

- 1887 Fairchild, H. L. B. W. B. (In his Hist. N. Y. Acad. Sc. 1887. p. 92-3)

BUIST, Robert. 1805-1880

- 1899 Harshberger, John. R. B. (In his Botanists of Phila. 1889. p. 193-95)

BULFINCH, Thomas. 1796-1867

- 1868 Bost. Soc. Nat. Hist. Proc. v. 11, p. 279-84. 1868.

BURBANK, Levi S. 1828-1880

- 1880 Bost. Soc. Nat. Hist. Proc. v. 21, p. 49-51. 1880.

BURGESS, Edward. 1848-1891

- 1892 Scudder, S. H. & others. E. B. (In Bost. Soc. Nat. Hist. Proc. v. 25, p. 358-65. 1892)

Bibliography, p. 362-64.

BURK, Isaac. 1816-1893

- 1899 Harshberger, John. I. B. (In his Botanists of Phila. 1899. p. 220-21)

BURNETT, Waldo Irving. 1828-1854

- 1854 Amer. J. Sc. ser. 2, v. 18, p. 255-64. Sept. 1854.

Wyman, Jeffries. W. I. B. (In Bost. Soc. Nat. Hist. Proc. v. 5, p. 64-74. Nov. 1854)

- 1857 Amer. Acad. A. & Sc. Proc. v. 3, p. 163-64. 1857. (Read in 1854)

- 1880 Bouve, T. T. W. I. B. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 61-2)

BUTTRICK, Samuel Bartlett. 1801-1887

- 1888 Essex Inst. Bull. v. 20, p. 157-58. 1888.

BYRD, William. 1764-1793

- 1886 Goode, G. B. W. B. (In Biol. Soc. Wash. Proc. v. 3, p. 79-80. 1886)

Repr. in U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, p. 388. 1901.

(Memorial of G. B. Goode)

CABELL, James Lawrence. 1813-1889

- 1904 Nat. Cycl. Amer. Biog. v. 12, p. 452. 1904.

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 185-86.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 151-52.

CABOT, Samuel, Jr. 1815-1885

- 1886 Auk. v. 3, p. 144. Jan. 1886.

Amer. Acad. A. & Sc. Proc. v. 21, p. 517-20. 1886.

Bibliography, p. 519-20.

CALDWELL, Charles. 1772-1853

- 1859 Amer. Phil. Soc. Proc. v. 6, p. 77-80. 1859.

- 1917 Ky. Med. Jour. v. 15, appx. p. 72-4, port. Nov. 1, 1917. (Some of the medical pioneers of Ky.)

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 190.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 155-56.

CANBY, William Marriott. 1831-1904

- 1899 Harshberger, John. W. M. C. (In his Botanists of Phila. 1899. p. 278-83, port.)

- 1904 Rose, J. N. W. M. C. (In Bot. Gaz. v. 37, p. 385-88, port. May, 1904)

Bibliography, p. 387-88.

CAREY, John. 1797-1880

- 1880 Gray, Asa. J. C. (In Amer. J. Sc. ser. 3, v. 19, p. 421. 1880)

- 1889 Gray, Asa. J. C. (In Gray, Asa. Scientific Papers. 1889. v. 2, p. 417-18)

CARPENTER, George Washington. 1802-1860

- 1909 Nat. Cycl. Amer. Biog. v. 10, p. 235. 1909.

CARR, Ezra Slocum. 1819-1894

CARSON, Joseph. 1808-1876

1899 Harshberger, John. J. C. (In his *Botanists of Phila.* 1899. p. 199-208)
Bibliography, p. 206-8.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 199.

*CARVER, Jonathan. 1710-1780

1893 Greely, A. W. J. C. (In his *explorers & travellers.* N. Y. 1893. p. 71-87)

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 200.

CASSELS, John Lang. 1808-1879

1918 Avery, E. M. J. L. C. (In his *Cleveland & its environs.* v. 1, p. 556-57. 1918)

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 201.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 166.

CASSIN, John. 1813-1869

1869 *Amer. J. Sc.* ser. 2, v. 47, p. 291-93. 1869.

Brewer, T. M. J. C. (In *Bost. Soc. Nat. Hist. Proc.* v. 12, p. 244-48. 1869)

1901 Stone, Witmer. J. C. (In *Cassinia.* v. 5, p. 1-7, port.)

1902 Gill, T. N. J. C. (In *Osprey.* n. s. v. 1, p. 50-3, 80-4, port. 1902)

1918 Skelton, F. H. *Birthplace of J. C.* (In *Cassinia.* v. 22, p. 1-2, 3-5. 1918)

*CATESBY, Mark. 1679-1749

1888 Hagen, H. A. M. C., painter of N. A. insects. (In *Psyche.* v. 5, p. 134-35. Nov.-Dec. 1888)

1901 U. S. Nat. Mus. *Ann. Rept.* 1897. 1901. p. 389-90. (pt. 2: Memorial G. B. Goode)

1918 Gee, Wilson. M. C. (In *Univ. S. C. Bull* no. 72, p. 9-13. Sept. 1918).

CATLIN, George. 1796-1872

1891 *Pop. Sc. Mthly.* v. 39, p. 402-9, port. July, 1891.

CHADBOURNE, Paul Ansel. 1823-1883

1886 Appleton's *Cycl. Amer. Biog.* v. 1, p. 562-64. 1886.

CHAPMAN, Alvin Wentworth. 1809-1899

1899 Buge, J. G. A. W. C. *Buston, La.*, June, 1899. (In *Gulf Fauna & Flora.* Bull. v. 1, no. 1. 3 port.)

Knowlton, F. H. A. W. C. (In *Plant World.* v. 2, no. 9, p. 141-43, port. June, 1899)

Mohr, Charles. A. W. C. (In *Bot. Gaz.* v. 27, p. 473-78, port. June, 1899)

1914 Kelly, H. A. A. W. C. (In his *Some Amer. Medical Botanists.* Troy, N. Y., 1914. p. 163-64)

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 206-7.

1921 Kimball, Winifred. A. W. C.: *reminiscences of* (In *N. Y. Bot. Gard. Jour.* v. 22, p. 1-11. Jan. 1921)

CHICKERING, John White, Jr. 1831-1913

1888 Wood, William. J. W. C. (In *Portland Soc. Nat. Hist. Proc.* 1888-89. p. 6-9)

CHILTON, George. 1767-1836

1837 *Amer. J. Sc.* ser. 1, v. 31, p. 421-24. Jan. 1837.

CHOUTEAU, Charles Pierre

1901 Acad. Sc. St. Louis. Trans. v. 11, pref. p. 21-2.

CLAPP, Asahel. 1792-1862

1863 Amer. J. Sc. ser. 2, v. 35, p. 450-51. 1863.

CLARK, Henry James. 1826-1873

1874 Amer. Acad. A. & Sc. Proc. 1874. v. 9, p. 328-30.

1877 Packard, A. S., Jr. H. J. C. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 317-28. 1877)

Bibliography, p. 327-28. Rd. Apr. 23, 1874.

1912 Tuckerman, Frederick. H. J. C. (In Science. n. s. v. 35, p. 725-30. May 10, 1912)

CLARK, William. 1770-1838

1893 Greeley, A. W. W. C. (In his Explorers & travellers. N. Y. 1893. p. 105-62)
Coues, Elliott. W. C. (In Coues, E., ed. History of Expedition of Lewis & Clark. N. Y. 1893. v. 1, pref. p. 63-97)

1901 Lighton, W. B. Lewis & Clark. Bost. Houghton, 1901. 159 p. port.

CLARKE, Daniel. 1812-1884

1901 Michigan Acad. Sc. Rept. for 1900. 1901. p. 109, port.

CLAYTON, John. (of Virginia) 1685-1773

1805 Madison, James, Barton, B. S., and Galt, Dr. Memorandums of the life and writings of Mr. J. C., the celebrated botanist of Virginia. (In Phila. Med. & Phys. Jour. v. 2, pt. 1, p. 139-45. Nov. 27, 1805)

1909 Jour. Botany. v. 47, p. 297-301. 1909. (By James Britten)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 226.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 185.

CLEAVELAND, Parker. 1790-1858

1858 Amer. J. Sc. ser. 2, v. 26, p. 448-49. Nov. 1858.

1860 Amer. Acad. A. & Sc. Proc. v. 4, p. 226-27. 1860.

Woods, Leonard. P. C.; 2d ed. Brunswick, Me., 1860. 80 p.

From Maine Hist. Soc. Coll. v. 6, p. 375-435. 1859.

1883 Amer. Assoc. Adv. Sc. Proc. v. 31, p. 9-10. 1883.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 228.

CLEMENS, Brackenridge

1910 Pop. Sc. Mthly. v. 76, p. 472, port. May, 1910.

CLEMONS, Thomas G. 1807-1888

1906 Nat. Cycl. Amer. Biog. v. 13, p. 43. 1906.

CLINGMAN, Thomas Lanier. 1812-1897

1897 Nat. Cycl. Amer. Biog. v. 7, p. 199-200. 1897.

CLINTON, De Witt. 1769-1828

1828 Mitchill, S. L. A discourse on the character and scientific attainments of De Witt Clinton . . . delivered before the N. Y. Lyceum of Natural History, July 14, 1828. N. Y. 1828. 28 p.

Other biographical sketches of Clinton are easily accessible.

CLINTON, George William. 1807-1885

- 1885 Day, D. F. G. W. C. (In Torrey Bot. Club. Bull. v. 12, p. 103-6. 1885)
 1886 Gray, Asa. G. W. C. (In Amer. J. Sc. ser. 3, v. 31, p. 17-20. 1886)
 1889 Gray, Asa. G. W. C. (In Gray Sc. Papers. 1889. v. 2, p. 475-78)
 1890 Day, D. F. . . . G. W. C. Buffalo, 1890. 29 p.

Delivered before Buffalo Hist. Soc.

COATES, Benjamin Hornor. 1797-1881

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 230-31.

COATES, Reynell. 1802-1886

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 231-32.

COGSWELL, Joseph Green. 1786-1871

- 1874 Ticknor, A. E., ed. Memorial of . . . Bost. 1874.
 1891 Appleton's Cycl. Amer. Biog. v. 1, p. 679. 1891.

COLDEN, Cadwallader. 1688-1776

- 1843 Gray, Asa. Selections from the scientific correspondence of C. C. with Gronovius, Linnaeus, Collinson and other naturalists. (In Amer. J. Sc. v. 44, no. 1, p. 85-133. Jan. 1843)
 1914 Kelly, H. A. C. C. (In his Some American Medical Botanists. Troy, N. Y., 1914. p. 38-43, port.)

See also Jane COLDEN, below.

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 239-40.

COLDEN, Jane. 1724-1766

- 1895 Britten, James. J. C. and the flora of New York. (In Jour. Botany. v. 33, p. 12-5. 1895)
 1907 Vail, Anna Murray. J. C., an early N. Y. botanist. (In Torrey. v. 7, p. 21-34, port. Feb. 28, 1907)

COLE, Thomas. 1779-1852

- 1881 Memorial Hist. Boston. 1881. v. 4, p. 520.

*COLLINSON, Peter. 1694-1768

- 1851 Dillingham, W. H. P. C. Phila. 1851. 37 p.
 2d ed. Phila. 1852. 48 p.
 1860 Gardener's Mthly. v. 2, p. 197-98. 1860.

COMMONS, Albert. 1829-

- 1899 Harshberger, John. A. C. (In his Botanists of Phila. 1899. p. 272-73)

COMSTOCK, John Lee. 1789-1858

- 1886 Appleton's Cycl. Amer. Biog. v. 1, p. 702. 1886.

CONRAD, Solomon White. 1779-1831

- 1899 Harshberger, John. S. W. C. (In his Botanists of Phila. 1899. p. 125-26)

CONRAD, Timothy Abbott. 1803-1877

- 1877 Amer. J. Sc. ser. 3, v. 14, p. 247-48. 1877.
 1885 Marcou, J. B. Writings of T. A. C. (In U. S. Nat. Mus. Bull. no. 30, p. 205-22. 1885)

- 1888 Dall, W. H. T. A. C. (In Biol. Soc. Wash. Proc. v. 4, p. 113-14. 1888)
 1895 Pop. Sc. Mthly. v. 47, p. 257-63, port. June, 1895. (By Abbott, C. C.)
 1896 Youmans, W. J. T. A. C. (In his Pioneers Science in America. 1896. p. 365-93)
 1906 Merrill, G. P. T. A. C. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 355-57)

COOK, George Hammell. 1818-1889

- 1889 Smock, J. C. . . . G. H. C. (In Amer. Inst. Mining Eng. Trans. v. 18, p. 218-22. 1889)
 ——— G. H. C., late state geologist of New Jersey. (In Amer. Geol. v. 4, p. 321-26, port. 1889)
 Amer. J. Sc. ser. 3, v. 38, p. 498-99. 1889.
 1891 Addresses commemorative of G. H. C., delivered June 17, 1890, at Rutgers College. Newark, N. J., 1891. 53 p.
 1894 Smock, J. C. Geological writings of G. H. C. (In Geol. Soc. America. Bull. v. 5, p. 569-71. 1894).
 1902 Gilbert, G. K. G. H. C. (In Nat. Acad. Sc. Biogr. Mem. v. 4, p. 135-44. 1902)
 Bibliography, p. 143-44. Rd. Apr. 21, 1897.

COOLEY, Dennis. 1787-1860

- 1901 Michigan Acad. Sc. Rept. for 1900. 1901. p. 108, port.

COOPER, James Graham. 1830-1902

- 1899 Emerson, W. O. J. G. C. (In Condor. v. 1, no. 1, p. 1-5, port. Jan.-Feb. 1899)
 1902 ——— J. G. C.: in memoriam. (In Condor. v. 4, no. 5, p. 101-2. Sept.-Oct. 1902)
 Grinnell, Joseph. Ornithological writings of J. G. C. (In Condor. v. 4, no. 5, p. 103-6. Sept.-Oct. 1902).
 Osprey. n. s. v. 1, p. 107-8, port. 1902.
 Science. n. s. v. 16, p. 268-69. 1902.
 Auk. v. 19, p. 421-22. Oct. 1902.
 Raymond, W. J. J. G. C. (In Nautilus. v. 16, p. 73-5, port. Nov. 1902)
 1903 ——— Writings of J. G. C. on conchology and palaeontology, with list of species described by him. (In Nautilus. v. 17, p. 6-12. May, 1903)
 1919 Taylor, W. P. . . . Notes on mammals collected principally in Washington and California between the years 1853 and 1874 by Dr. J. G. Cooper . . . San Francisco, 1919. (In Cal. Acad. Sc. Proc. ser. 4, v. 9, no. 3, p. 69-121)
 Biography, p. 72-80; Bibliography, p. 118-21.

COOPER, Thomas. 1759-1840

- 1906 Merrill, G. P. T. C. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 261-62, port.)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 249-50.

COOPER, William. 1798-1864

- 1887 Fairchild, H. L. W. C. (In his Hist. N. Y. Acad. Sc. 1887. p. 70-3, port.)

COPE, Edward Drinker. 1840-1897

- 1881 Pop. Sc. Mthly. v. 19, p. 110-13. May, 1881.
 1897 Science. n. s. v. 5, p. 705-17, port. May 7, 1897. (By Gill, T. N.)
 Gill, Theodore. E. D. C., naturalist: a chapter in the history of science.

(In Science. n. s. v. 6, p. 225-43. Aug. 13, 1897)

1898 Geol. Soc. America. Bull. v. 9, p. 401-8. 1898. (By Scott, W. B.)

Amer. Assoc. Adv. Sc. Proc. 1898. v. 46, p. 1-30.

1899 King, Helen Dean. E. D. C. (In Amer. Geol. v. 23, p. 1-41. 1899)

Bibliography, p. 10-41.

1900 Frazer, Persifor. The life and letters of E. D. C. (In Amer. Geol. v. 26, p. 67-130, 2 port. 7 facsim.)

Amer. Phil. Soc. Memorial Volume. Proc. v. 1, p. 273-314, port. 1900.

1910 Benjamin, Marcus. E. D. C. (In Jordan, D. S. Leading Amer. men of science. 1910. p. 313-40)

CORNELIUS, Elias. 1794-1832

1907 Nat. Cycl. Amer. Biog. v. 5, p. 431. 1907.

*CORREA DA SERRA, Jose Francisco. 1750-1823

1886 Appleton's Cycl. Amer. Biog. v. 1, p. 746. 1886.

COTTING, John Ruggles. 1784-1867

1868 Amer. J. Sc. ser. 2, v. 45, p. 141-42. 1868.

COUES, Elliott. 1842-1899

1900 Bird-Lore. v. 2, p. 3-4, port. Feb. 1900.

See also v. 4, p. 3-9, 1902. (By Elliot & Curtis)

Science. n. s. v. 11, p. 161-63. Feb. 2, 1900. (By Allen, J. A.)

1901 Elliot, D. G. E. C. (In Auk. v. 18, no. 1, p. 1-11, port Jan. 1901)

1909 Allen, J. A. E. C. (In Nat. Acad. Sc. Biogr. Mem. v. 6, p. 395-446. 1909)

Bibliography, p. 426-46. Rd. Apr. 1909.

COURTIS, Ambrose S. 1798-1836

1880 Bouve, T. T. A. S. C. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 26-7.

COUTHOUY, Joseph Pitty. 1808-1864

1880 Bouve, T. T. A. S. C. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 134-35)

1888 Dall, W. H. J. P. C. (In Biol. Soc. Wash. Proc. v. 4, p. 108-11, port. 1888)

COX, Edward Travers. 1821-1907

1908 Merrill, G. P. E. T. C. (In Smith. Inst. Misc. Coll. v. 52, p. 83-4, port. May 1, 1908)

COZZENS, Issacher, Jr. 1780-1865

1887 Fairchild, H. L. I. C. (In his Hist. N. Y. Acad. Sc. 1887. p. 90)

1899 Vogdes, A. W. I. C., Jr. (In Amer. Geol. v. 24, p. 327-28. 1899)

CRAMER, Charles

1887 Fairchild, H. L. C. C. (In his Hist. N. Y. Acad. Sc. 1887. p. 89-90)

CRAWE, Ithamar Bingham. 1792-1847

1847 Amer. J. Sc. ser. 2, v. 4, p. 300. Sept. 1847.

CROOM, Hardy Bryan. 1797-1837

1885 Chapman, A. W. H. B. C. (In Bot. Gaz. v. 10, p. 251-54. Apr. 1885)

1896 Sargent's Silva N. A. v. 10, p. 58. 1896.

- 1920 Barnhart, J. H. H. B. C. (In N. Y. Bot. Gard. Jour. v. 21, p. 164; 165, footnote. 1920)

CURTIS, Moses Ashley. 1808-1872

- 1873 Amer. Acad. A. & Sc. Proc. v. 8, p. 471-72. 1873.
Amer. J. Sc. ser. 3, v. 5, p. 391-93. 1873. (By Gray, Asa).
1885 Wood, T. F. A sketch of the botanical work of the Rev. M. A. C. (In Elisha Mitchell Sc. Soc. Jour. v. 2, p. 9-31. 1885)
Contains Bibliography.
1886 Dudley, W. R. Sketch of M. A. C. (In Jour. Mycology. v. 2, no. 5, p. 54-9. May, 1886)
1889 Pop. Sc. Mthly. v. 34, p. 405-10, port. Jan. 1889.
Gray, Asa. M. A. C. (In his Scientific Papers. 1889. v. 2, p. 351-53).
1919 Shear, C. L., and Stevens, N. E. The mycological work of M. A. C. Lancaster, Pa., July, 1919. (In Mycologia. v. 11, no. 4, p. 181-201)
Bibliography, p. 200-1.

CUTBUSH, Edward. -1823

- 1901 Goode, G. B. E. C. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2, p. 91-2 (footnote). 1901)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 272.
Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 216.

CUTBUSH, James

- 1901 See references above under CUTBUSH, Edward.

CUTLER, Manasseh. 1742-1823

- 1881 Essex Inst. Bull. v. 12, p. 88-9. 1881.
1898 Humphrey, J. E. M. C. (In Amer. Nat. v. 32, p. 75-80. Feb. 1898)
1903 Lloyd Library, Cincinnati. Bull. no. 7. 1903. pref. 8 p. port.

DANA, James Dwight. 1813-1895

- 1885 Marcou, J. B. Writings of J. D. D. . . . Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 223-27)
1895 Dana, E. S. J. D. D. (In Amer. J. Sc. ser. 3, v. 49, p. 329-56, port. 1895)
Bibliography, chronologically arranged, p. 349-56.
Repr. from Bibliographies of the present officers of Yale Univ. New Haven, 1893.
Farrington, O. C. J. D. D. as a teacher of geology. (In Jour. Geol. v. 3, p. 335-40. 1895)
Williams, H. S. J. D. D. and his work as a geologist. (In Jour. Geol. v. 3, 601-21. 1895).
1896 Le Conte, J. L. J. D. D. (In Geol. Soc. America. Bull. v. 7, p. 461-79. 1896)
Bibliography, p. 474-79.
Beecher, C. E. J. D. D. (In Amer. Geol. v. 17, p. 1-16, port. 1896)
Contains Bibliography, p. 7-16.
Powell, J. W. Memorial addresses before the Scientific Societies of Washington: J. D. Dana. (In Science. n. s. v. 3, p. 181-85. 1896)
1899 Gilman, D. C. Life of J. D. D., scientific explorer, mineralogist, geologist, professor in Yale University. N. Y. Harper, 1897. 12 + 409 p. port.
Bibliography, p. 385-94.
Amer. Acad. A. & Sc. Proc. v. 48, p. 410-13, port. 1899.

Benjamin, Marcus. J. D. D. (In Amer. Assoc. Adv. Sc. Proc. v. 48, p. 410-12. 1899)

Repr. in Science. n. s. v. 10, p. 634-35. Nov. 3, 1899.

1910 Rice, W. N. J. D. D. (In Jordan, D. S. Leading American men of science. 1910. p. 233-68)

1913 Hadley, A. T., and others. J. D. D. centenary. (In Geol. Soc. America. Bull. v. 24, p. 55-69. 1913).

Addresses by W. N. Rice, E. O. Hovey, G. P. Merrill and J. M. Clarke.

1915 Rice, W. N. The geology of J. J. D. New Haven, 1915. (In RICE, W. N. and others. Problems of American geology. ch. 1, p. 1-42)

1919 PIRSSON, L. V. J. D. D. (In Nat. Acad. Sc. Biogr. Mem. v. 9, p. 41-92, port. Dec. 1919)

Bibliography, p. 83-92.

DANA, James Freeman. 1793-1827

1878 Smith, B. P. J. F. D. (In his History of Dartmouth College. 1878. p. 271-75).

1909 Nat. Cycl. Amer. Biog. v. 10, p. 390. 1909.

DANA, Samuel Luther. 1795-1868

1868 Amer. J. Sc. ser. 2, v. 45, p. 424-25. 1868.

1873 Amer. Acad. A. & Sc. Proc. v. 8, p. 26-9. 1873.

(Read in 1868)

1896 Pop. Sc. Mthly. v. 49, p. 692-97, port. Sept. 1896.

Youmans, W. J. S. L. D. (In his Pioneers of science in America. 1896. p. 311-18, port.)

DARBY, John. 1804-1877

1877 Amer. J. Sc. ser. 3, v. 14, p. 499-500. Dec. 1877.

1888 Appleton's Cycl. Amer. Biog. v. 2, p. 76-7. 1888.

DARLINGTON, William. 1782-1863

1863 Amer. Phil. Soc. Proc. v. 9, p. 330-43. 1863-64. (By T. P. James)

Amer. J. Sc. ser. 2, v. 36, p. 132-39. July, 1863.

Memorial of W. D. . . . West Chester, Pa. 1863. 32 p. port.

1886 Minn. Acad. Nat. Sc. Bull. v. 13, p. 35-7. Dec. 1886.

1894 Futhey, J. S. W. D. (In New England Hist. Genealog. Soc. Mem. Biog. (for 1862-64). v. 5, p. 202-20. 1894)

1899 Harshberger, John. W. D. (In his Botanists of Phila. 1899. p. 134-44, port.)

1913 Chester County Historical Society. Exercises in memory of Humphry Marshall and William Darlington at Marshallton, Pa., September 27, 1913. 34 p. pl. (In its Bulletin)

p. 6-12, The Botanic work of H. M., and W. D., by John Harshberger.

1914 Kelly, H. A. W. D. (In his Some American medical botanists. Troy, N. Y., 1914. p. 113-17, port.)

DARRACH, James. 1828-

1899 Harshberger, John. J. D. In his Botanists of Phila. 1899. p. 258-59)

DARRACH, William. 1796-1865

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 285.

DAVIS, Charles Henry. 1807-1877

1877 Amer. Acad. A. & Sc. Proc. 1877. v. 12, p. 313-20.

1902 Davis, C. H. C. H. D. (In Nat. Acad. Sc. Biogr. Mem. v. 4, p. 23-55. 1902)
Rd. in 1896, in April.

DAVIS, Edward Hamilton. 1811-1888

1920 Kelly & Burrage. Amer. Med. Biogr. 1920. p. 289-90.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 229-30.

DAVIS, Emerson. 1789-1866

1921 Torrey Bot. Club. Mem. v. 16, p. 292. 1921.

*DAWSON, John William. 1820-1899

1900 Geol. Soc. Amer. Bull. v. 11, p. 550-80. 1900. (By Adams, F. D.)

Bibliography, by Ami, H. M., p. 557-80.

DAY, David Fisher. 1829-1900

1900 Cowell, J. F. D. F. D. (In Bot. Gaz. v. 30, p. 347-48, port. Nov. 1900)

DEAN, John. 1831-1887

1888 Amer. Acad. A. & Sc. Proc. 1888. v. 23, p. 319-20.

DEANE, James. 1801-1858

1858 Amer. J. Sc. ser. 2, v. 26, p. 155. July, 1858.

Bouve, T. T. J. D. (In Bost. Soc. Nat. Hist. Proc. v. 6, p. 391-94. 1858)

Bowditch, H. I. J. D. Greenfield, Mass. 1858. 45 p.

Delivered Aug. 4, 1858, before Franklin District Medical Society.

DE KAY, James Ellsworth. 1799-1851

1852 Amer. J. Sc. ser. 2, v. 13, p. 300-1. Mar. 1852.

1887 Fairchild, H. L. J. E. D. (In his Hist. N. Y. Acad. Sc. 1887. p. 85-6)

1907 Nat. Cycl. Amer. Biog. v. 9, p. 204-5 1907.

DELAFIELD, Joseph. 1790-1875

1887 Fairchild, H. L. J. D. (In his Hist. N. Y. Acad. Sc. 1887. p. 64-8, port.)

DESOR, Pierre Jean Eduoard. 1811-1882

1880 Neuchatel Soc. Sc. Bull. v. 12, p. 551-76. 1880.

1882 Amer. Acad. A. & Sc. Proc. 1882. v. 17, p. 422-24.

Schweizer. Naturf. Gesell. Verhandl. v. 65, p. 81-104. 1882.

1883 Amer. Phil. Soc. Proc. 1882. 1883. v. 20, p. 519-28. (By Lesley, J. P.)

DEWEY, Chester. 1784-1867

1868 Amer. J. Sc. ser. 2, v. 45, p. 122-23. Jan. 1868.

Amer. Acad. A. & Sc. Proc. v. 8, p. 25-6. 1868.

1870 Smith. Inst. Ann. Rept. 1870. v. 25, p. 231-40. (By Anderson, M. B.)

1881 Memorial Hist. Boston. 1881. v. 4, p. 520.

1889 Gray, Asa. C. D. (In Gray, Asa. Sc. Papers. v. 2, p. 345-46. 1889)

1912 Beckwith, Florence. C. D. (In Rochester Acad. Sc. Proc. v. 5, p. 41-2. 1912)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 309-10.

DE WITT, Simeon. 1756-1834

1835 Amer. J. Sc. v. 27, p. 395. Jan. 1835.

- 1852 Beck, T. R. Eulogium on the life and services of . . . (In Albany Inst. Trans. v. 2, p. 309-27. 1852)

DILLINGHAM, William Henry. 1791-1854

- 1859 Jarlington, William. W. H. D. (In Simpson, Henry. Lives of eminent Philadelphians. 1859. p. 311-15)

*DOUGLAS, David. 1798-1834

- 1860 B., G. Abridged sketch of the life of D. D., botanist; with a few details of his travels and discoveries. (In Canadian Nat. & Geol. v. 5, p. 120-32, 267-78, 329-49. 1860)

Also on p. 200-8.

- 1904 Anon. Literary remains of D.D., botanist of the Oregon country. (In Oregon Hist. Soc. Quart. v. 5, no. 3, p. 215-22. Sept. 1904).

v. 5, p. 223-29. A brief memoir of the life of D. D., with extracts from his letters . . .

v. 5, p. 230-71. Sketch of a journey to the Oregon country.

v. 5, no. 4, p. 325-69. Dec. 1904. Sketch cont.

v. 6, no. 3, p. 76-97. 1905. Sketch cont.

DOUGLAS, DAVID BATES. 1790-1849

- 1887 Appleton's Cycl. Amer. Biog. v. 2, p. 216-17. 1887.

- 1897 Nat. Cycl. Amer. Biog. v. 7, p. 3-5, port. 1897.

DOWLER, Bennet. 1797-1879

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 327

DOWNING, Andrew Jackson. 1815-1852

- 1915 Standard Cycl. Hort. ed. by L. H. Bailey. 1915. v. 3, p. 1572-73, port.

DRAKE, Daniel. 1785-1852

- 1880 Drake, C. D. D. D. (In New England Hist. Genalog. Soc. Mem. Biog. v. 1, (for 1845-52), p. 448-64. 1880)

- 1909 Justtner, Otto. D. D. & his followers. Cincinnati, 1909.

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 328-29.

Also in Kelly. Cycl. Amer. Med. Biog. 1912. v. 1, p. 252-55.

DRAYTON, John. 1766-1822

- 1918 Gee, Wilson. J. D. (In Univ. S. C. Bull. no. 72, p. 24-8, port. Sept. 1918).

DROWNE, Solomon. 1753-1834

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 354-55.

*DRUMMOND, Thomas. 1780-1835

- 1909 Pop. Sc. Mthly. v. 74, p. 48-9, port. Jan. 1909.

DUCATEL, Julius Timoleon. 1796-1849

- 1849 Amer. J. Sc. ser. 2, v. 8, p. 146-49. July, 1849.

- 1906 Merrill, G. P. J. T. D. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 322-23, port.)

DU CHAILLU, Paul Belloni. 1835-1903

- 1888 Appleton's Cycl. Amer. Biog. v. 2, p. 240-41, port. 1888.

- 1893 Greely, A. W. P. B. D. (In his Explorers & travellers. N. Y. 1893. p. 330-48)

DUNBAR, George Powers. 1812-1850

- 1882 Wortman, J. L. Ichthyological papers by G. P. D., with a sketch of his life. (In Amer. Nat. v. 16, p. 381-88. May, 1882)

DUNBAR, William. 1749-1810

- 1899 Riley, F. L. W. D. (In Miss. Hist. Soc. Publications. v. 2, p. 85-111. 1899)

DU PONCEAU, Peter Stephen. 1760-1844

- 1859 Wharton, T. I. P. S. D. (In Simpson, Henry. Lives of eminent Philadelphians. 1859. p. 329-33)

DURAND, Elie Magloire. 1794-1873

- 1873 Meehan, Thomas. E. M. D. (In Acad. Nat. Sc. Phila. Proc. for 1873. p. 355-59)
Proctor, William, Jr. Memoir of E. M. D. Phila. 1873. 10 p.
1888 Appleton's Cycl. Amer. Biog. v. 2, p. 268-69. 1888.
1899 Harshberger, John. E. D. (In his Botanists of Phila. 1899. p. 174-78, port.)

DURKEE, Silas. 1798-1878

- 1878 Amer. Acad. A. & Sc. Proc. v. 14, p. 343-44. 1878.
1881 Memorial Hist. Boston. 1881. v. 4, p. 524.

DYER, Charles Brain. 1806-1883

- 1898 Nat. Cycl. Amer. Biog. v. 4, p. 528. 1898.

EARLE, John Milton. 1794-1874

- 1909 Nat. Cycl. Amer. Biog. v. 11, p. 145, port. 1909.

EATON, Amos. 1776-1842

- 1890 Pop. Sc. Mthly. v. 38, p. 113-18, port. Nov. 1890.
1895 Yale Sc. Mthly. v. 2, p. 1-7. 1895.
1896 Youmans, W. J. A. E. (In his Pioneers of science in America. 1896. p. 111-18)
1897 Ballard, H. H. Amos Eaton: a pioneer of science in Berkshire County. Pittsfield, Mass., 1897. (In Berkshire Hist. & Sc. Soc. Coll. 1897. p. 183-267)
Knowlton, F. H. A. E. (In Plant World. v. 1, no. 2, p. 17-8, port. Nov. 1897)

EATON, Daniel Cady. 1834-1895

- 1895 Amer. J. Sc. ser. 3, v. 50, p. 184-88. 1895.
Setchell, W. A. D. C. E. (In Torrey Bot. Club. Bull. v. 2, no. 7, p. 341-51, port. Aug. 1895)
Bibliography, p. 348-51.
Davenport, G. E. D. C. E. (In Bot. Gaz. v. 20, no. 8, p. 366-69, port. Aug. 1895)
Brewer, W. H. D. C. E. (In Yale Sc. Mthly. v. 2, p. 1-7. Oct. 1895)

EATON, Hezekiah Hulbert. 1809-1832

- 1832 Short, C. W. H. H. E. Lexington, Ky., 1832. (In Transylvania Jour. Med. & Assoc. Sc. v. 5, p. 469-81)

EATON, Timothy Dwight. 1807-1828

1829 Amer. J. Sc. ser. 1, v. 15, p. 404. 1829.

EBERLE, John. 1787-1838

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 351-52.

EDDY, Caspar Wistar. 1790-1828

1887 Fairchild, H. L. C. S. E. (In his History N. Y. Acad. Sc. 1887. p. 23)

EDWARDS, Henry. 1830-1891

1891 Entomological News. v. 2, p. 129-30, port. Sept. 1891.

EDWARDS, William H. 1822-1909

1909 Entomological News. v. 20, p. 193-94, port. May, 1909.

1910 Pop. Sc. Mthly. v. 76, p. 47, port. 1910.

EGLESTON, Thomas. 1832-1900

1899 Martin, D. S. T. E. (In Pop. Sc. Mthly. v. 55, p. 256-65. June, 1899)
School of Mines Quart. (Columbia Univ.). v. 21, p. 197-218. 1899.

1900 Columbia Univ. Quart. 1900. v. 2, p. 138-48.

1901 Amer. Inst. Mining Eng. Trans. 1901. v. 31, p. 3-24. (By Kunz, G. P.)

EIGHTS, James. 1798-1882

1916 Clarke, J. M. The reincarnation of J. E., Antarctic explorer. (In Scientific Mthly. v. 2, p. 189-202. Feb. 1916)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 355-56.

ELLET, Charles. 1810-1862

1871 Stuart, C. B. C. E. (In his Lives & works of civil and military engineers of America. 1871. p. 257-85)

ELLIOT, Daniel Giraud. 1836-1915

1915 Amer. Mus. Jour. v. 15, p. 132-41, port. 1915.

1916 Science. n. s. v. 43, p. 159-62. Feb. 4, 1916. (By Allen, J. A.)

1917 Chapman, F. M. D. G. E. (In Auk. v. 34, p. 1-10, port. Jan. 1917)

ELLIOTT, Stephen. 1771-1830

1825 Amer. J. Sc. v. 9, p. 275-76. Jan. 1825.

1883 Ravenel, H. W. S. E. (In Bot. Gaz. v. 8, no. 7, p. 249-53. July, 1883)

1894 Garden & Forest. v. 7, p. 201-2, port. May 23, 1894.

Britton, N. L. Note on the herbarium of S. E. (In Torrey Bot. Club. Bull. v. 21, p. 80-1. 1894)

1901 Barnhart, J. H. Dates of publication of the "Sketch . . ." (In Torrey Bot. Club. Bull. v. 28, p. 680-88. Dec. 1901)

1918 Gee, Wilson. S. E. (In Univ. S. C. Bull. no. 72, p. 35-7. Sept. 1918)

ELLIS, Job Bicknell. 1829-1905

1890 Anderson, F. W. (In Bot. Gaz. v. 15, no. 11, p. 299-304, port. Nov. 1890)

1899 Harshberger, John. J. B. E. (In his Botanists of Phila. 1899. p. 259-72, port.)

*ELLIS, John. 1710-1776

1901 Carruthers, William. J. E. (In Royal Microsc. Soc. Jour. for 1901. p. 113-22)

EMERSON, George Barrell. 1797-1881

- 1880 Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 235-37, port.
 1881 Amer. Acad. A. & Sc. Proc. 1881. v. 16, p. 427-29.
 1884 Waterston, R. C. Memoir of G. B. E. Cambridge, Mass., 1884. 126 p.
 Rd. before Mass. Hist. Soc. May 10, 1883.

EMMONS, Ebenezer. 1799-1863

- 1885 Marcou, Jules. E. E. (In Science. v. 5, p. 456-58, port. June 5, 1885).
 1891 ——— E. E. (In Amer. Geol. v. 7, p. 1-23, port. 1891)
 Bibliography, p. 17-21.
 1896 Pop. Sc. Mthly. v. 48, p. 406-11, port. Jan. 1896.
 Youmans, W. J. E. E. (In his Pioneers of science in America. 1896.
 p. 347-53, port.)

EMORY, William Helmsley. 1811-1887

- 1892 Sargent's Silva N. A. v. 4, p. 60. 1892.
 1897 Nat. Cycl. Amer. Biog. v. 4, p. 336-37. 1897.

ENGELMANN, George. 1809-1884

- 1884 Amer. J. Sc. ser. 3, v. 28, p. 61-7. 1884.
 Torrey Bot. Club. Bull. v. 11, p. 38-40, port. 1884.
 Amer. Acad. A. & Sc. Proc. v. 19, p. 516-22. 1884.
 Science. v. 3, p. 405-8. 1884.
 Parry, C. C. G. E. (In Davenport Acad. Sc. Proc. v. 14, p. 242-44. Feb. 29, 1884)
 Sargent, C. S. G. E. (In Bot. Gaz. v. 9, no. 5, p. 69-74. May, 1884)
 1886 Acad. Sc. St. Louis. Trans. 1886. v. 4, p. 1-18, port. (By Sander, Enno)
 Pop. Sc. Mthly. v. 29, p. 260-65, port. 1886.
 1887 Trelease, William, and Gray, Asa, ed. The botanical works of the late George Engelmann, collected for Henry Shaw, Esq.; ed. by . . . Cambridge, Mass., Wilson & Son, 1887. 548 p. 103 pl. 4°.
 Biogr. sketch, pref. p. 3-6.
 1889 Gray, Asa. G. E. (In Gray, Asa. Scientific Papers. 1889. v. 2, p. 439-46).
 1898 Pop. Sc. Mthly. v. 52, p. 637-39. Mar. 1898. (Starr).
 1902 White, C. A. G. E. (In Nat. Acad. Sc. Biogr. Mem. v. 4, p. 1-21. 1902).
 Rd in April, 1896.
 1909 Spaulding, Perley. G. E. (In Pop. Sc. Mthly. v. 74, p. 125-29, port. 1909).
 1914 Kelly, H. A. G. E. (In his Some American medical botanists. Troy, N. Y., 1914. p. 157-62)
 1920 Kelly & Burrage. Amer. Med. Biogr. 1920. p. 365-66.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 285-87.

ENNIS, Jacob. 1807-1890

- 1899 Harshberger, John. J. E. (In his Botanists of Phila. 1899. p. 197-98)

ESHLEMAN, J. K. 1810-1897

- 1899 Harshberger, John. J. K. E. (In his Botanists of Phila. 1899. p. 208)

EVANS, John. 1790-1862

- 1899 Harshberger, John. J. E. (In his Botanists of Phila. 1899. p. 167-72)
 From Garden & Forest. v. 10, p. 182-83, 198. 1897, entitled John Evans and his garden.

EVANS, John. 1812-1861

1861 Jackson, C. T. A sketch of the life and scientific services of John Evans, geologist for Oregon and Washington territories, and of the U. S. Chiriqui Exploring Expedition. (In Amer. J. Sc. ser. 2, v. 32, p. 311-18. Nov. 1861)

1868 Acad. Sc. St. Louis. Trans. v. 2, p. 162-64. 1868.

Read on Aug. 19, 1861.

EVERHART, Benjamin Matlack. 1818-1902

1909 Nat. Cycl. Amer. Biog. v. 10, p. 470. 1909.

EWBANK, Thomas. 1792-1870

1897 Nat. Cycl. Amer. Biog. v. 7, p. 559. 1897.

FAHNESTOCK, George Wolff. 1823-1868

1874 Biogr. Encycl. Pennsylvanians, 19th century. Phila. 1874. p. 193.

1899 Harshberger, John. G. W. F. (In his Botanists of Phila. 1899. p. 245)

FAYSSOUX, Peter Dott. 1745-1795

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 300-1.

FEATHERSTONHAUGH, George William. 1780-1866

1867 Geol. Soc. London. Quart. Jour. v. 23, pref. p. 43-5. 1867.

1889 Featherstonhaugh, J. D. G. W. F. (In Amer. Geol. v. 3, p. 217-23. 1889)

FENDLER, Augustus. 1813-1883

1885 Amer. J. Sc. ser. 3, v. 29, p. 169-71. 1885. (By Gray, Asa)
Canby, W. M. An autobiography and some reminiscences of the late A. F.
(In Bot. Gazette. v. 10, p. 285-90, 301-4, 319-22. 1885)

1889 Gray, Asa. A. F. (In his Scientific Papers. v. 2, 1889. p. 465-67)

1909 Pop. Sc. Mthly. v. 74, p. 240-43, port. Mar. 1909.

FEUCHTWANGER, Lewis. 1805-1875

1888 Appleton's Cycl. Amer. Biog. v. 2, p. 445-46. 1888.

FIELD, Martin. 1774-1834

1834 Amer. J. Sc. v. 26, p. 204-5. Apr. 1834.

FITCH, Asa. 1809-1879

1879 Thurston, E. L. A. F. (In Pop. Sc. Mthly. v. 16, p. 116-20, port. Nov. 1879)

1903 N. Y. Genealog. & Biogr. Record. v. 34, p. 155-58, 248, port. 1903.

FLAGG, Wilson. 1805-1884

1884 Auk. v. 1, p. 306. July, 1884.

1900 Nat. Cycl. Amer. Biog. v. 8, p. 310, port. 1900.

FLINT, Charles L. 1824-1889

1890 Putnam, F. W. C. L. F. (In Bost. Soc. Nat. Hist. Proc. v. 24, p. 199-200. 1890)

FOLSOM, George. 1802-1869

1904 Nat. Cycl. Amer. Biog. v. 12, p. 228. 1904.

FOREMAN, Edward. 1808-1885

1885 *Smith. Inst. Ann. Rept.* 1885. p. 24.

FOSTER, John Wells. 1815-1873

1873 *Pop. Sc. Mthly.* v. 3, p. 508. 1873.

1885 Whittlesey, Charles. J. W. F. (*In Mag. Western Hist.* v. 2, p. 85-7, port. May, 1885)

1899 Benjamin, Marcus. J. W. F. (*In Amer. Asso. Adv. Sc. Proc.* v. 48, p. 435-36. 1899)

Repr. in *Science.* n. s. v. 10, p. 707-8. Nov. 17, 1899.

***FOTHERGILL, John. 1712-1780**

1860 *Gardener's Mthly.* v. 2, p. 225-26. Aug. 1860.

1914 Kelly, H. A. J. F. (*In his Some American medical botanists.* Troy, N. Y., 1914. p. 18-9)

1919 Fox, B. H. Dr. J. F. and his friends: chapters in eighteenth century life. London, Macmillan, 1919. 24 + 434 p. pl. port.

Fothergill corresponded with many American botanists, chiefly John Bartram.

FOULKE, William Parker. 1816-1868

1868 Lesley, J. P. W. P. F. (*In Amer. Phil. Soc. Proc.* v. 10, p. 481-510. 1868)

FOWLER, Samuel Page

1888 *Appleton's Cycl. Amer. Biog.* v. 2, p. 518. 1888.

FOX, Charles

1916 Swales, B. H. The ornithological writings of C. F. (*In Univ. Michigan Mus. of Zool. Occas. Papers.* no. 26, Apr. 15, 1916. 2 p.)

FRANCIS, John Wakefield. 1789-1861

1898 *Nat. Cycl. Amer. Biog.* v. 1, p. 393, port. 1898.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 409.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 317-18.

FRANKLIN, Benjamin. 1706-1790

1890 *Amer. Phil. Soc. Proc.* v. 28, p. 161-226, port. 1890. (Proceedings commemorative of the centennial anniversary of the death of B. F.)

1896 Youmans, W. J. B. F. (*In his Pioneers of Science in America.* 1896. p. 1-23)

1916 Hussakof, Louis. B. F., and Erasmus Darwin; with some unpublished correspondence. (*In Science.* n. s. v. 43, p. 773-75. 1916)

FRASER, John. 1750-1811

1917 Barnhart, J. H. J. F. (*In N. Y. Bot. Gard. Jour.* v. 18, p. 240, rtnote. 1917)

FRAZER, John Fries. 1812-1872

1873 Le Conte, J. L. J. F. F. (*In Amer. Phil. Soc. Proc.* v. 13, p. 183-90. 1873)

FREMONT, John Charles. 1813-1890

1856 Schmucker, S. M. Life of Col. J. C. F. and his narrative of explorations and adventures in Kansas, Nebraska, Oregon and California. N. Y. 1854. 493 p.

- 1837 Fremont, J. C. *Memoirs of my life . . .* N. Y., 1837. 19 + 655 p. illus. pl. port.
 1893 Greeley, A. W. J. C. F. (In his *Explorers & travellers*. N. Y. 1893. p. 212-39)
 1914 Dellenbaugh, Frederick. *Fremont and '49 . . .* N. Y. Putnam, 1914. 23 + 547 p. illus. pl. maps.

FROST, Charles Christopher. 1805-1880

- 1886 Dudley, W. R. C. C. F. (In *Jour. Mycology*. v. 2, no. 10, p. 114. Oct. 1886)
 1908 Murrill, W. A. *Notes on the life and work of C. C. F.* (In *Torreya*. v. 8, no. 8, p. 197-200, Aug. 1908)

Consideration of work done by Frost, 1847 to 1875.

FULLER, Charles B.

- 1893 Winkley, W. H. C. B. F. (In *Nautilus*. v. 7, p. 58. Sept. 1893)

GABB, William More. 1839-1878

- 1878 *Amer. Nat.* v. 12, p. 494-95. 1878.
 1909 Dall, W. H. W. M. G. (In *Nat. Acad. Sc. Biogr. Mem.* v. 6, p. 345-61, port. 1909)

Bibliography, p. 356-61. Rd. Nov. 8, 1908.

GALE, Leonard Dunnell. 1800-1883

- 1883 *Amer. J. Sc.* ser. 3, v. 26, p. 490. 1883.
 1885 *Smith. Inst. Ann. Rept. for 1883.* Wash. 1885. p. 46-7.

GALLATIN, Albert. 1761-1849

- 1880 Adams, Henry. A. G. (In *New England Hist. Genealog. Soc. Mem. Biog.* v. 1, p. 203-12. 1880)

GAMBEL, William. 1821-1849

- 1851 *Amer. J. Sc.* ser. 2, v. 11, p. 143-44. Jan. 1851.
 1899 Harshberger, John. W. G. (In his *Botanists of Phila.* 1899. p. 231-33)
 1910 Stone, Witmer. W. G. (In *Cassinia*. v. 14, p. 1-8, pl. 1910)

GARDEN, Alexander. 1728-1792

- 1901 Goode, G. B. A. G. (In *U. S. Nat. Mus. Ann. Rept. for 1897.* pt. 2. Wash. 1901. p. 388)
 Repr. from *Biol. Soc. Wash. Proc.* v. 3, p. 80. 1886.
 1914 Kelly, H. A. A. G. (In his *Some American medical botanists.* Troy, N. Y., 1914. p. 60-8)
 1918 Gee, Wilson. A. G. (In *Univ. S. C. Bull.* no. 72, p. 14-6. Sept. 1918)
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 423-24.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 330-31.

GARLICK, Theodatus. 1805-1884

- 1918 Avery, E. M. T. D. G. (In his *Cleveland & its environs.* 1918. v. 1, p. 556)
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 426-28.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 331-33.

GARRETT, Andrew. 1823-1887

- 1899 *Nat. Cycl. Amer. Biog.* v. 2, p. 162. 1899.

GATES, Hezekiah. 17 -1850?

1921 Torrey Bot. Club. Mem. v. 16, p. 294. 1921.

GATTINGER, Augustin. 1825-1903

1893 Torrey Bot. Club. Bull. v. 20, p. 332-33. 1893.

1904 Science. n. s. v. 19, p. 869. June 3, 1904.

Amer. Hist. Mag. v. 9, p. 153-78, port. Apr. 1904. (By Robert A. Halley)

GAY, Martin. 1803-1849

1850 Amer. J. Sc. ser. 2, v. 9, p. 305-6. Mar. 1850.

1880 Bouve, T. T. M. G. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 52-3)

GEDDINGS, Eli. 1799-1878

1887 Appleton's Cycl. Amer. Biog. v. 2, p. 622. 1887.

GENTH, Frederick Augustus. 1820-1893

1893 Amer. J. Sc. ser. 3, v. 45, p. 257-58. 1893.

Amer. Acad. A. & Sc. Proc. v. 28, p. 393-94. 1893.

1901 Amer. Phil. Soc. Proc. v. 40, pref. p. x-xii, port. 1901.

1902 Barker, G. F. F. A. G. (In Nat. Acad. Sc. Biogr. Mem. v. 4, p. 201-31, port. 1902)

Bibliography, p. 221-31. Rd. Nov. 12, 1901.

GEYER, Karl Andreas. 1809-1853

1853 Chronik des Gartenwesens. 1853. v. 3, p. 185-87.

1855 Reichenbach, H. G. K. A. G. (In Kew Garden Miscellany. v. 7, p. 181-83. 1855)

1909 Spaulding, Perley. K. A. G. (In Pop. Sc. Mthly. v. 74, p. 124-25. Feb. 1909)

GIBBES, Lewis Reeve. 1810-1894

1918 Gee, Wilson. L. R. G. (In Univ. S. C. Bull. no. 72, p. 42-5. Sept. 1918)
Bibliography, p. 44-5.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 434.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 327-38.

GIBBES, Robert Wilson. 1809-1866

1909 Nat. Cycl. Amer. Biog. v. 11, p. 36-7. 1909.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 434-35.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 338.

GIBBONS, Henry. 1808-1884

1897 Nat. Cycl. Amer. Biog. v. 7, p. 287-88, port. 1897.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 435.

GIBBONS, William Peters. 1812-1897

1897 Jepson, W. L. W. P. G. Berkeley, Cal., June, 1897. (In Erythea. v. 5, no. 6, p. 74-6)

1906 Nat. Cycl. Amer. Biog. v. 13, p. 181. 1906.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 436.

GIBBS, George. 1777-1833

1833 Amer. J. Sc. v. 25, p. 214-15. 1833.

1883 Amer. Assoc. Adv. Sc. Proc. 1883. v. 31, p. 6-8. (By G. J. Brush)

GIBBS, George. 1815-1873

- 1874 Smith. Inst. Ann. Rept. 1873. Wash. 1874. v. 28, p. 219-25. (By Stevens, J. A., Jr.)

GIBSON, John Banister. 1780-1853

- 1888 Appleton's Cycl. Amer. Biog. v. 2, p. 640. 1888.

GILL, Theodore Nicholas. 1837-1914

- 1914 Science. n. s. v. 40, p. 547-50. 1914.
 1915 Amer. Mus. Jour. v. 15, p. 9-11. 1915.
 Palmer, T. S. T. N. G. (In Auk. v. 32, p. 391-405, port. Oct. 1915)
 1916 Smith. Inst. Ann. Rept. for 1915. Wash. 1916. p. 26-7.
 Dall, W. H. T. N. G. (In Nat. Acad. Sc. Biogr. Mem. v. 8, p. 313-43, port. 1916)
 Bibliography, p. 322-43.
 1917 Dall, W. H. T. G. Wash. 1917. (In Smith. Inst. Ann. Rept. 1916. p. 579-86, port.)

GILLIAMS, Jacob

- 1852 Ruschenberger, W. S. W. J. G. (In his Notice of Philadelphia Academy of Natural Sciences. 1852. p. 46-7)
 See also 2d ed., 1860.

GILLISS, James Melville. 1811-1865

- 1877 Gould, B. A. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 135-79. 1877)
 Rd. before Acad. on Jan. 26, 1866.

GILMOR, Robert. -1848

- 1849 Amer. J. Sc. ser. 2, v. 7, p. 142-43. Jan. 1849.

GILPIN, Thomas. -1853

- 1859 Amer. Phil. Soc. Proc. v. 6, p. 13-4. 1859.

GIRARD, Charles. 1822-1889

- 1891 Goode, G. B. Bibliographies of American naturalists: the published writings of Dr. C. G. Wash. 1891. 6 + 141 p. port. (In U. S. Nat. Mus. Bull. no. 41)
 Pref. 6 p. is a Biographical sketch.

GIRARDIN, Lewis Hue. 1771-1825

- 1837 Ducatel, J. T. L. H. G. (In Maryland Acad. Sc. & Literature. Trans. v. 1, pt. 1, art. 1, p. 17-23. 1837)

GIRAUD, Jacob Post, Jr. 1811-1870

- 1870 Amer. J. Sc. ser. 2, v. 50, p. 293-94. 1870.
 1919 Auk. v. 36, p. 464-72. Oct. 1919.

GLOVER, Townsend. 1813-1883

- 1888 Dodge, C. R. T. G. (In U. S. Dept. Agric. Div. Entomology. Bull. no. 18. Wash. 1888. 68 p. illus. pl. port)
 1910 Pop Sc. Mthly. v. 76, p. 475. May, 1910.

GODMAN, John Davidson. 1794-1830

- 1835 Sewall, Thomas. J. D. G. (In North Amer. Rev. v. 40, p. 87-99. Jan. 1835)

- 1901 Goode, G. B. J. D. G. (In U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, Wash. 1901. p. 451)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 445-46.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 347-48, port.

*GOLDIE, John. 1793-1886

- 1886 Bot. Gaz. v. 11, p. 272-75. Oct. 1886.

GOODALE, George Lincoln. 1839-1923

- 1891 Pop. Sc. Mthly. v. 39, p. 691-94, port. Sept. 1891.
 1923 Science. n. s. v. 57, p. 654-56. June 8, 1923. (By William Trelease)
 Rhodora. v. 25, p. 117-20, port. Aug. 1923. (By L. H. Bailey)
 Amer. J. Sc. ser. 5, v. 6, p. 275-76. Sept. 1923.

GOODRICH, Samuel Griswold. 1793-1860

- 1907 Nat. Cycl. Amer. Biog. v. 5, p. 355, port. 1907.

GOSS, N. H. 1826-1891

- 1891 Auk. v. 8, p. 245-47. Apr. 1891.

GOULD, Augustus Addison. 1805-1866

- 1866 Amer. J. Sc. ser. 2, v. 42, p. 434-35. 1866.
 1868 Amer. Acad. A. & Sc. Proc. v. 7, p. 300-4. 1868.
 Bost. Soc. Nat. Hist. Proc. v. 11, p. 188-205. 1868.

Bibliography, p. 197-205.

- 1880 Bouve, T. T. A. A. G. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 111-16, port.)
 1888 Dall, W. H. A. A. G. (In Biol. Soc. Wash. Proc. v. 4, p. 120-22. 1888)
 1905 Wyman, Jeffries. A. A. G. (In Nat. Acad. Sc. Biogr. Mem. v. 5, p. 91-113. 1905)

Bibliography, p. 106-13. (By W. H. Dall)
 Rd. Apr. 22, 1903.

GRAHAM, George. 1798-1881

- 1881 Cincinnati Soc. Nat. Hist. Jour. v. 4, p. 85-9. 1881.

GRAY, Asa. 1810-1888

- 1872 Pop. Sc. Mthly. v. 1, p. 491-95. 1872.
 1886 Barnes, C. R., and others. . . . On Gray's 75th birthday. (In Bot. Gaz. v. 11, p. 1-6, 7-10, port. 1886)
 1888 Amer. Acad. A. & Sc. Proc. 1888. v. 23, p. 321-43.
 Amer. J. Sc. ser. 3, v. 35, p. 181-203. 1888. (Dana)
 Riley, C. V. Personal reminiscences of A. G. (In Bot. Gaz. v. 13, p. 178-86. July, 1888)
 Amer. J. Sc. ser. 3, v. 36, appx. 67 p. Sept. & Oct. 1888.
 List of writings (chronologically arranged) of Asa Gray.
 Amer. Nat. v. 22, p. 280-82. March, 1888.
 Deane, Walter. A. G. (In Torrey Bot. Club. Bull. v. 15, no. 3, p. 59-72, port. Mar. 1888)
 Farlow, W. G. A. G. (In Bot. Gaz. v. 13, no. 3, p. 49-52. March, 1888)
 1889 Royal Soc. London. Proc. 1889. v. 46, pref. p. 15-8.
 Acad. Nat. Sc. Phila. Proc. 1888. v. 40, p. 57-72.
 Cal. Acad. Nat. Sc. Proc. 1889. ser. 2, v. 1, p. 309-12.

Essex Inst. Bull. v. 20, p. 146-50. 1889.

Gray, Asa. Scientific papers of Asa Gray, selected by C. S. Sargent. Bost. 1889. 2 v.

v. 1, 8 + 397 p. Reviews of works in botany & related subjects: 1834-1887.

v. 2, 4 + 503 p. Essays and biographical sketches: 1841-1886.

1890 Goodale, G. L. A. G. (In Bost. Soc. Nat. Hist. Proc. v. 24, p. 191-98. 1890)

Smith. Inst. Ann. Rept. for 1888. Wash. 1890. pt. 1, p. 745-825.

p. 745-62 (Dana, J. D.); p. 763-83 (Farlow, W. G.); p. 785-825 (Bibliography)

1893 Gray, Asa. Letters. Bost. 1893. 2 v.

v. 1, 368 p.; v. 2, p. 369-838.

Bibliography, v. 2, p. 818-25.

1895 Farlow, W. G. A. G. (In Nat. Acad. Sc. Biogr. Mem. v. 3, p. 161-75. 1895)

Rd. Apr. 17, 1889.

1899 Amer. Assoc. Adv. Sc. Proc. v. 48, p. 440-43, port. 1899. (By Marcus Benjamin)

Science. n. s. v. 10, p. 709-11. Nov. 13, 1899.

Repr. of preceding.

1910 Coulter, J. M. A. G. (In Jordan, D. S. Leading American men of science. 1910. p. 211-31)

1914 Kelly, H. A. A. G. (In his Some American medical botanists. Troy, N. Y., 1914. p. 165-77, port.)

GREEN, Jacob. 1790-1841

1888 Dall, W. H. J. G. (In Biol. Soc. Wash. Proc. v. 4, p. 104-5. 1888)

1901 Goode, G. B. J. G. (In U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2. Wash. 1901. p. 216, 445.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 459.

GREEN, Traill. 1813-1897

1899 Harshberger, John. T. G. (In his Botanists of Phila. p. 209. 1899)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 463-64.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 361.

GREENE, Benjamin Daniel. 1793-1862

1863 Amer. J. Sc. ser. 2, v. 35, p. 449-50. 1863. (By Gray, Asa)

Bost. Soc. Nat. Hist. Proc. v. 9, p. 174-76. 1863.

1866 Amer. Acad. A. & Sc. Proc. v. 6, p. 132-33. 1866. (Read in 1863)

1880 Bouve, T. T. B. D. G. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 88-91)

1881 Memorial Hist. Boston. 1881. v. 4, p. 522.

1889 Gray, Asa. B. D. G. (In Gray, Asa. Sc. Papers. v. 2, p. 310-11. 1889).

1897 Nat. Cycl. Amer. Biog. v. 7, p. 509. 1897.

GREENE, Edward Lee. 1843-1915

1916 Bartlett, H. H. The botanical work of E. L. G. (In Torrey. v. 16, no. 7, p. 151-75, port. July, 1916)

GREENLEAF, Richard Cranch. 1809-1887

1888 Wells, Samuel. R. C. G. (In Bost. Soc. Nat. Hist. Proc. v. 23, p. 529-31. Mar. 1888)

GREENWOOD, Francis William Pitt. 1797-1843

- 1880 Bouve, T. T. F. W. P. G. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 40-1)
 1881 Memorial Hist. Boston. 1881. v. 4, p. 524.
 1887 Appleton's Cycl. Amer. Biog. v. 2, p. 757-58. 1887.

GREGG, Josiah. -1850

- 1899 Harshberger, John. J. G. (In his Botanists of Phila. 1899. p. 246)

GRIFFITH, Robert Eglesfield. 1798-1850

- 1904 Nat. Cycl. Amer. Biogr. v. 12, p. 552. 1904.
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 468.

GROTE, Augustus Radcliffe. 1841-1903

- 1903 Entomological News. v. 14, p. 277-78, pl. 1903.
 Entomological Mag., London. v. 39, p. 206. 1903.

*GUNDLACH, Juan. 1811-1896

- 1896 Auk. v. 13, p. 267. July, 1896.

GUYOT, Arnold Henry. 1807-1884

- 1884 Amer. Acad. A. & Sc. Proc. v. 19, p. 522-26. 1884.
 Pop. Sc. Mthly. v. 25, p. 261-65, port. June, 1884. (By Scott, W. B.)
 1886 N. Y. Acad. Sc. Trans. v. 3, p. 66-8. 1886.
 Dana, J. D. A. G. (In Amer. J. Sc. ser. 3, v. 31, p. 358-70. 1886)
 1889 Dana, J. D. A. G. (In Nat. Acad. Sc. Biogr. Mem. v. 2, p. 309-47. 1886)
 Repr. in Smith. Inst. Ann. Rept. for 1887. Wash. 1889. pt 1, p. 693-722.
 Bibliography, p. 345-46 (p. 721-22).
 Read April 21, 1886.
 1896 Youmans, W. J. A. G. (In his Pioneers of Science in America. 1896. p. 492-99)

HAGEN, Hermann August. 1817-1893

- 1893 Entomological News. v. 4, p. 313-17, port. Dec. 1893.
 1894 Amer. Acad. A. & Sc. Proc. 1894. v. 29, p. 419-23.
 Psyche. v. 7, p. 35. Feb. 1894.
 Amer. Nat. v. 28, p. 95-6. Jan. 1894.

HAGER, Albert David. 1817-1888

- 1897 Nat. Cycl. Amer. Biog. v. 3, p. 324. 1897.

HAGUE, James Duncan. 1836-1908

- 1899 Nat. Cycl. Amer. Biog. v. 2, p. 154-55, port. 1899.

HALDEMAN, Samuel Stedman. 1812-1880

- 1880 Amer. Nat. v. 14, p. 755-56. 1880.
 1881 Amer. Acad. A. & Sc. Proc. v. 16, p. 456-57. 1881.
 1882 Amer. Phil. Soc. Proc. v. 19, p. 279-85. 1882. (By Brinton, D. G.)
 Pop. Sc. Mthly. v. 21, p. 395-401, port. July, 1882.
 1886 Lesley, J. P. S. S. H. (In Nat. Acad. Sc. Biogr. Mem. v. 2, p. 139-72. 1886)
 Rd. Nov. 16, 1881.
 1888 Dall, W. H. S. S. H. (In Biol. Soc. Wash. Proc. v. 4, p. 112-13. 1888)
 1912 Entomological News. v. 23, p. 1, port. Jan. 1912.

HALE, Benjamin Ives. 1797-1863

1906 *Nat Cycl. Amer. Biog.* v. 13, p. 39. 1906.

HALE, Horatio. 1817-1896

1897 *Pop. Sc. Mthly.* v. 51, p. 401-10. July, 1897.

HALE, Moses. 1780-1837

1857 *Med. Soc. N. Y. Trans.* 1857. p. 73-8.

HALL, Charles Francis. 1821-1871

1893 Greely, A. W. C. F. H. (In his *Explorers & travellers*. N. Y. 1893. p. 293-311)

1897 *Nat. Cycl. Amer. Biog.* v. 3, p. 281-82, port. 1897.

HALL, Elihu. 1822-1882

1884 Milligan, Mrs. J. M. E. H. (In *Bot. Gaz.* v. 9, no. 4, p. 59-62. April, 1884)

HALL, Frederick. 1780-1843

1843 *Amer. J. Sc.* ser. 1, v. 45, p. 404. Sept. 1843.

1888 *Appleton's Cycl. Amer. Biog.* v. 3, p. 40. 1888.

HALL, James. 1811-1898

1883 Murray, David. A catalogue of the published work of J. H.: 1836-1882. Albany, 1883. (In N. Y. State Mus. 36th Ann. Rept. for 1882. p. 79-94)

Cont. in 42nd Ann. Rept. for 1888. Albany, 1889. p. 75-97. Cont. to 1894, by J. M. Clarke, in *Amer. Geol.* v. 23, p. 149-68.

1884 *Pop. Sc. Mthly.* v. 26, p. 120-23, port. 1884.

1885 Marcou, J. B. The writings of J. H. . . . Wash. 1885. (In U. S. Nat. Mus. Bull. v. 30, p. 231-35)

1896 Clarke, J. M. Prof. J. H., and the Geological Survey of the 4th District of New York: 1837-1843. (In *Science.* n. s. v. 4, p. 706-12. Nov. 13, 1896)
McGee, W. J. J. H., founder of American stratigraphy. (In *Science.* n. s. v. 4, p. 700-6, 2 port. Nov. 13, 1896)

1899 *Amer. Geol.* v. 23, p. 137-68. 1899. (By H. C. Hovey & J. M. Clarke)

Bibliography, p. 149-68.

Soc. Geol. de France. Bull. ser. 3, v. 27, p. 168-73. 1899.

Amer. Assoc. Adv. Sc. Proc. v. 48, p. 416-18, port. 1899. (By Marcus Benjamin)

Repr. in *Science.* n. s. v. 10, p. 671-72. Nov. 10, 1899.

1900 *Geol. Soc. America. Bull.* v. 10, p. 425-51. 1900. (By Stevenson, J. J.)

Bibliography, p. 437-51.

1906 *Smith. Inst. Ann. Rept.* for 1904. Wash. 1906. p. 381-84.

1922 CLARKE, John Mason. James Hall of Albany, geologist and palaeontologist, 1811-1898. Albany, N. Y., S. C. Bishop, 1921. 565 p. 11 pl. front. port.

HALSEY, Abraham. 1790-1857

1887 Fairchild, H. L. A. H. (In his *History* N. Y. Acad. Sc. 1887. p. 86-7)

HAMLIN, Charles Edward. 1825-1886

1886 *Amer. Acad. A. & Sc. Proc.* 1886. v. 21, p. 524-26.

HARLAN, Richard. 1796-1843

- 1859 Simpson's Lives of eminent Philadphians. 1859. p. 490-91.
 1888 Appleton's Cycl. Amer. Biog. v. 3, p. 84. 1888.
 1901 Goode, G. B. R. H. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2. Wash. 1901. p. 450-51)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 492.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 385.

HARRIOT, Thomas. 1560-1621

- 1901 Goode, G. B. T. H. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2. Wash. 1901. p. 357-62)
 Repr. from Biol. Soc. Wash. Proc. v. 3, p. 35-43. 1886.

HARRIS, Edward. 1799-1863

- 1902 Morris, G. S. E. H. (In Cassinia. v. 6, p. 1-5, port. 1902)

HARRIS, Thaddeus Mason. 1768-1842

- 1881 Memorial Hist. Boston. 1881. v. 4, p. 519.

HARRIS, Thaddeus William. 1795-1856

- 1856 Amer. Acad. A. & Sc. Proc. v. 3, p. 224-25. 1856.
 1860 Scudder, S. H. Chronological index to entomological writings of T. W. H. (In Bost. Soc. Nat. Hist. Proc. v. 7, p. 213-22. 1860)
 1862 Essex Inst. Proc. v. 2, p. 2-3. 1862.
 1869 Scudder, S. H., ed. Entomological correspondence of T. W. H., M.D. Bost. 1869. (In Bost. Soc. Nat. Hist. Occasional Papers. v. 1)
 See also Proc. v. 21, p. 150-52. 1881.
 For Contents, see ANNOTATED BIBLIOGRAPHY: SCUDDER, (4)
 1913 Dow, R. D. T. W. H. (In Brooklyn Ent. Soc. Bull. v. 8, p. 106-18. Dec. 1913)

HARTMAN, William Dell. 1817-1899

- 1899 Nautilus. v. 13, p. 61-3, port. Oct. 1899.

HARTT, Charles Frederick. 1840-1878

- 1878 Rathbun, Richard. C. F. H. (In Bost. Soc. Nat. Hist. Proc. v. 19, p. 338-64. 1878)
 Bibliography, p. 362-64.
 1890 Matthew, G. F. C. F. H. (In Nat. Hist. Soc. New Brunswick. Bull. v. 9, p. 1-24. 1890)
 1897 Simonds, F. W. C. F. H. (In Amer. Geol. v. 19, p. 69-90. 1897)
 Contains Bibliography, p. 87-90.

***HARTWEG, Theodore. 1812-1871**

- 1897 Jepson, W. L. The explorations of Hartweg in America. Berkeley, Cal., Mar. 1897. (In Erythea. v. 5, no. 3, p. 31-5, 51-6)

***HARVEY, William Henry. 1811-1866**

- 1866 Amer. J. Sc. ser. 2, v. 42, p. 273-77. 1866.
 1867 Smith. Inst. Ann. Rept. 1867. v. 22, p. 131-34. (By Gray)
 1889 Gray, Asa. W. H. H. (In Gray, Asa. Sc. Papers. 1889. v. 2, p. 337-42)
 1913 Praeger, R. L. W. H. H. (In Oliver, F. W. Makers of British botany. 1913. p. 204-24)

HAVELL, Robert, Jr. 1793-1878

- 1916 Williams, G. A. R. H., Jr., engraver of Audubon's "Birds of America."
(In Print—Collector's Quart. v. 6, no. 3, p. 226-56, illus. pl. Oct. 1916)

HAWN, Frederick. 1810-1898

- 1898 Broadhead, G. C. F. H. (In Amer. Geol. v. 21, p. 267-69, port. May, 1898)
Bibliography, p. 269.

HAYDEN, Ferdinand Vandever. 1829-1887

- 1888 Amer. J. Sc. ser. 3, v. 35, p. 179-80.
Science. v. 11, p. 1-2. Jan. 6, 1888.
Lesley, J. P. F. V. H. (In Amer. Phil. Soc. Proc. v. 25, p. 59-61. 1888)
Peale, A. C. F. V. H. (In Phil. Soc. Wash. Bull. v. 11, p. 476-78. 1888-91)
Cope, E. D. F. V. H. (In Amer. Geol. v. 1, p. 110-12. Feb. 1888)
1889 Walcott, C. D. F. V. H. (In U. S. Geol. Surv. 9th Ann. Rept. 1887-88.
p. 31-8. 1889)
1895 White, C. A. F. V. H. (In Nat. Acad. Sc. Biogr. Mem. v. 3, p. 397-413,
port. 1895)
Bibliography, p. 409-13.
Ed. Nov. 1894.
1906 Merrill, G. P. F. V. H. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash.
1906. p. 603-6, port.)

HAYDEN, Horace H. 1768-1844

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 507.
Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 392.

HAYES, Augustus Allen. 1806-1882

- 1883 Amer. Acad. A. & Sc. Proc. v. 18, p. 422-27. 1883.
Contains Bibliography, p. 424-27.

HAYES, Isaac Isreal. 1832-1881

- 1893 Greeley, A. W. I. I. H. (In his Explorers & travellers. N. Y. 1893.
p. 272-92)
1897 Nat. Cycl. Amer. Biog. v. 3, p. 280, port. 1897.

HAYS, Isaac. 1796-1879

- 1880 Amer. Acad. A. & Sc. Proc. v. 15, p. 380-81. 1880.
Amer. Phil. Soc. Proc. v. 18, p. 259-60. 1880.
1881 College of Physicians of Phila. Trans. ser. 3, v. 5, pref. p. 77-110. 1881.
(By Alfred Stille)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 508-9.
Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 392-93.

HAYWARD, George. 1791-1863

- 1864 Amer. Acad. A. & Sc. Proc. v. 6, p. 296-97. 1864.

HEERMANN, Adolphus. 1818-1865

- 1907 Cassinia. v. 11, p. 1-6, port. 1907.

HEISTER, John P. 1803-1854

- 1899 Harshberger, John. J. P. H. (In his Botanists of Phila. 1899. p. 186)

HEMBEL, William. 1764-1851

- 1852 Ruschenberger, W. S. W. Notice. Phila. Acad. Nat. Sc. 1852. p. 59-60.

HEMPHILL, Henry. 1830-1914

- 1914 Dall, W. H. H. H. (In Science. n. s. v. 40, p. 265-66. Aug. 21, 1914)

HENRY, Joseph. 1799-1878

- 1878 Amer. J. Sc. ser. 3, v. 15, p. 462-68. 1878.
 Smith. Inst. Ann. Rept. 1878. v. 33, p. 143-77, 262-360. (By Gray, Asa)
 1879 Amer. Acad. A. & Sc. Proc. 1879. v. 14, p. 356-67.
 1881 Smith. Inst. Misc. Coll. v. 21, art. 1. 1881. 528 p. port.
 1897 Goode, G. B. J. H. (In The Smith. Inst.: 1846-1896. Wash. 1897. The three Secretaries. p. 115-56, port.)

HENTZ, Nicholas Marcellus. 1797-1856

- 1875 Burgess, Edward, and Emerton, J. H. The Spiders of the U. S.; a collection of the arachnological writings of N. M. H. . . . Bost. 1875. 13 + 171 p. 20 pl. 353 fig. (In Bost. Soc. Nat. Hist. Occas. Papers. v. 2)
 Biography of Hentz, pref. p. 8-11; Bibliography, pref. p. 12-3.
 1887 Atkinson, G. F. N. M. H. (In Elisha Mitchell Sc. Soc. Jour. v. 4, pt. 1, p. 13-5. Jan.-June, 1887)
 Contains Bibliography.

HERRICK, Edward Claudius. 1811-1862

- 1862 Amer. J. Sc. ser. 2, v. 34, p. 159-60. July, 1862.
 1879 Porter. Hist. Yale College. 1879.
 Sketch of E. C. H., v. 1, p. 498-501, port.

HILDRETH, Samuel Prescott. 1783-1863

- 1863 Amer. J. Sc. ser. 2, v. 36, p. 312-13. Sept. 1863.
 1885 Whittlesey, Charles. S. P. H. (In Mag. Western Hist. v. 2, p. 81-2. May, 1885)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 526-27.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 1, p. 405-6.

HILGARD, Eugene Woldemar. 1833-1916

- 1916 Wickson, E. J., and Loughridge, R. H. E. W. H. (In Science. n. s. v. 43, p. 447-50, 450-53. Mar. 31, 1916)
 Univ. California Chronicle. v. 18, no. 2, 50 p. port.
 Contains Bibliography.
 1917 Smith, E. A. E. W. H. (In Geol. Soc. America. Bull. v. 28, p. 40-67, port. 1917)
 Bibliography, p. 54-67.
 1919 Slate, Fred. E. W. H. (In Nat. Acad. Sc. Biogr. Mem. v. 9, p. 95-155. Nov. 1919)
 Bibliography, p. 143-55.

HILGARD, Theodore Charles. 1828-1875

- 1898 Pop. Sc. Mthly. v. 52, p. 641. Mar. 1898. (Starr)
 1909 Pop. Sc. Mthly. v. 74, p. 130-33, port. 1909. (Spaulding)

HITCHCOCK, Charles Henry. 1836-1919

- 1898 *Pop. Sc. Mthly.* v. 54, p. 260-63. Dec. 1898.
 1920 Upham, Warren. C. H. H. (*In Geol. Soc. America. Bull.* v. 31, p. 64-80, port. 1920)

HITCHCOCK, Edward. 1793-1864

- 1863 Hitchcock, Edward. *Reminiscences of Amherst College, historical, scientific, biographical and autobiographical . . . Northampton, Mass., 1863.* 7 + 412 p.
 List of publications, p. 378-91.
 1864 *Amer. J. Sc.* ser. 2, v. 37, p. 302-4. Mar. 1864.
Amer. Phil. Soc. Proc. v. 9, p. 443-49. 1864.
 1867 Lesley, J. P. E. H. (*In Nat. Acad. Sc. Annual for 1866.* p. 129-54.
 1877 Lesley, J. P. E. H. (*In Nat. Acad. Sc. Biogr. Mem.* v. 1, p. 113-34. 1877)
 Rd. Aug. 9, 1866.
 1895 Hitchcock, C. H. E. H. (*In Amer. Geol.* v. 16, p. 133-49. 1895)
 Chronological bibliography, p. 139-49.
Pop. Sc. Mthly. v. 47, p. 689-96, port. Sept. 1895.
 1896 Youmans, W. J. E. H. (*In his Pioneers of Science in America.* 1896.
 p. 290-99)
 1906 Merrill, G. P. E. H. (*In U. S. Nat. Mus. Ann. Rept. for 1904.* Wash. 1906. p. 307-15, port.)

HITCHCOCK, Edward, Jr. 1828-1911

- 1906 *Nat. Cycl. Amer. Biog.* v. 13, p. 95-6, port. 1906.

HODGE, James Thatcher. 1816-1871

- 1892 *Appleton's Cycl. Amer. Biog.* v. 3, p. 224. 1892.
 1898 *Nat. Cycl. Amer. Biog.* v. 4, p. 548. 1898.

HOLBROOK, John Edward. 1796-1871

- 1871 *Amer. J. Sc.* ser. 3, v. 2, p. 389-90. 1871.
 1873 *Amer. Acad. A. & Sc. Proc.* v. 8, p. 473-74. 1873.
 1905 Gill, T. N. J. E. H. (*In Nat. Acad. Sc. Biogr. Mem.* v. 5, p. 47-77, port. facsim. 1905)
 Bibliography, p. 67-77. Rd. Apr. 22, 1903.
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 537-38.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 415-16.

HOLDER, Joseph Bassett. 1824-1888

- 1888 *Auk.* v. 5, p. 220. Apr. 1888.
 1897 *Nat. Cycl. Amer. Biog.* v. 7, p. 402, port. 1897.
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 539.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 1, p. 416-17.

HOLZER, Lawrence. 1819-1876

- 1912 Beckwith, F. M. L. H. (*In Rochester Acad. Sc. Proc.* v. 5, p. 42-3. Feb. 1912)

HOOPES, Josiah. 1832-1904

- 1899 Harshberger, John. J. H. (*In his Botanists of Phila.* 1899. p. 285-91)
 1904 *Auk.* v. 21, p. 311-12. Apr. 1904.

HOOPES, Joshua. 1788-1874

- 1899 Harshberger, John. J. H. (In his *Botanists of Phila.* 1899. p. 164-67)

HORN, George Henry. 1840-1897

- 1879 Henshaw, Samuel. The entomological writings of G. H. H. Cambridge, Mass., 1879. 6 p. (In *Dimmock's Special Bib.* no. 2)
- 1898 Acad. Nat. Sc. Phila. Proc. 1897. v. 49, p. 505-10, p. 515-18. 1898. (By Nolan, E. J.)
 Smith, J. B. Dr. Horn's contributions to coleopterology. (In Acad. Nat. Sc. Phila. Proc. 1897. v. 49, p. 529-35. 1898)
 ——— G. H. H. (In *Science*. n. s. v. 7, p. 73-7. Jan. 21, 1898)
Entomological News. v. 9, p. 1-3. Jan. 1898.
Psyche. v. 8, p. 159-60. Jan. 1898.
- 1898 Calvert, P. P. A biographical notice of G. H. H. (In *Amer. Ent. Soc. Trans.* v. 25, p. 1-24, appx. Apr. 1898)
 Henshaw, Samuel. The entomological writings of G. H. H., (1860-1896), with an index to the genera and species of Coleoptera described and named. (In *Amer. Ent. Soc. Trans.* v. 25, appx. p. 25-72. May-July, 1898)

HORNER, William Edmonds. 1793-1853

- 1896 Nat. Cycl. Amer. Biog. v. 6, p. 381. 1896.

HORSFORD, Eben Norton. 1818-1893

- 1893 Amer. Acad. A. & Sc. Proc. v. 28, p. 340-46. 1893.

HOSACK, David. 1769-1835

- 1895 Pop. Sc. Mthly. v. 47, p. 834-42, port. 1895.
- 1896 Youmans, W. J. D. H. (In his *Pioneers of science in America*. 1896. p. 100-10, port.)
- 1914 Kelly, H. A. D. H. (In his *Some American medical botanists*. Troy, N. Y., 1914. p. 97-103)
- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 561-62.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 12-3.

HOUGH, Franklin Benjamin. 1822-1885

- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 562-63.

HOUGHTON, Douglass. 1809-1845

- 1846 Amer. J. Sc. ser. 2, v. 1, p. 150-52. Jan. 1846.
- 1848 Amer. J. Sc. ser. 2, v. 5, p. 217-27. Mar. 1848.
- 1889 Bradish, Alvah. *Memoir of D. H., first state geologist of Michigan . . .* Detroit, 1889. 302 p.
- 1904 Michigan Acad. Sc. 4th Rept. 1904. p. 160-62, port.
- 1906 Merrill, G. P. D. H. (In *U. S. Nat. Mus. Ann. Rept. for 1904*. Wash. 1906. p. 361-62, port.)

HOVEY, Charles Mason. 1810-1887

- 1888 Appleton's *Cycl. Amer. Biog.* v. 3, p. 276. 1888.
- 1915 Standard *Cycl. Hort.* ed. by L. H. Bailey. 1915. v. 3, p. 1580-81, port.

HOVEY, Horace Carter. 1833-1914

- 1915 Clarke, J. M. H. C. H. (In *Geol. Soc. America. Bull.* v. 26, p. 21-6, port. 1915)

Bibliography, p. 25-6.

HOY, Philo Romaine. 1816-1892

1893 McMynn, J. G. P. R. H. (In Wisconsin Acad. Sc. & Letters. Trans. v. 9, pref. p. 75-7, port. 1893)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 571.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 19-20.

HUBBARD, Bela. 1814-1896

1886 Mag. Western Hist. v. 4, p. 572-81, port. 1886.

1904 Michigan Acad. Sc. 4th Rept. 1904. p. 163-65, port.

1907 Nat. Cycl. Amer. Biog. v. 5, p. 540-41. 1907.

HUBBARD, Oliver Payson. 1809-1900

1900 Science. n. s. v. 11, p. 742-43. 1900.

Amer. Geol. v. 25, p. 360-63, port. 1900. (By E. O. Hovey)

Bibliography, p. 362-63.

HUMPHREYS, Andrew Atkinson. 1810-1883

1884 Abbot, H. L. A. A. H. (In Science. v. 3, p. 476-77, port. Apr. 8, 1884)

Amer. Acad. A. & Sc. Proc. v. 19, p. 526-30. 1884

1886 Abbot, H. L. A. A. H. (In Nat. Acad. Sc. Biogr. Mem. v. 2, p. 201-15. 1886)

HUNT, Edward Bissell. 1822-1863

1864 Amer. Acad. A. & Sc. Proc. v. 6, p. 301-2. 1864.

HUNT, John Gibbons. 1826-

1899 Harshberger, John. J. G. H. (In his Botanists of Phila. 1899. p. 257-58)

HUNT, Thomas Sterry. 1826-1892

1892 Amer. Acad. A. & Sc. Proc. v. 27, p. 367-72. 1892.

Amer. J. Sc. ser. 3, v. 43, p. 246-48. 1892.

Douglas, James. T. S. H. (In Amer. Inst. Mining Eng. Trans. v. 21, p. 400-10. 1892)

1893 Pumpelly, Raphael. T. S. H. (In Geol. Soc. America. Bull. v. 4, p. 379-93. 1893)

Chronological bibliography, p. 385-93.

Frazer, Persifor. T. S. H. (In Amer. Geol. v. 11, p. 1-13, port. 1893)

1898 Douglas, James. T. S. H. (In Amer. Phil. Soc. Proc. Memorial. v. 1, p. 63-121. 1898)

Bibliography, p. 104-21.

1899 Amer. Assoc. Adv. Sc. Proc. for 1898. v. 48, p. 438-40, port. (By Marcus Benjamin)

Repr. in Science. n. s. v. 10, p. 708-9. Nov. 17, 1899.

HYATT, Alpheus, Jr. 1838-1902

1885 Pop. Sc. Mthly. v. 28, p. 261-67, port. Dec. 1885. (By Tarr, R. S.)

1902 Putnam, F. W. A. H. (In Bost. Soc. Nat. Hist. Proc. v. 30, p. 413-33. 1902)

Addresses also by Morse, Packard, Boyden & Warren.

Science. n. s. v. 15, p. 300-2. 1902.

1903 Amer. Acad. A. & Sc. Proc. v. 38, p. 715-27. 1903. (By Packard, A., Jr.)

Geol. Soc. America. Bull. v. 14, p. 504-12. 1903. (By Crosby, W. O.)

Bibliography, p. 509-12.

- 1904 Wash. Acad. Sc. Proc. 1904. v. 5, p. 389-91.
 1909 Brooks, W. K. A. H. (In Nat. Acad. Sc. Biogr. Mem. v. 6, p. 311-25.
 1909)

Rd. Apr. 23, 1908. Bibliography, p. 322-25.

- 1911 Mayer, A. G. A. H. (In Pop. Sc. Mthly. v. 78, p. 129-46. Feb. 1911)

IVES, Benjamin Hale. 1806-1837

- 1862 Essex Inst. Proc. v. 2, p. 25-6. 1862.

IVES, Eli. 1779-1861

- 1861 Amer. J. Sc. ser. 2, v. 32, p. 455. Nov. 1861.
 1867 Bronson, Henry. E. I. (In Conn. Med. Soc. Proc. ser. 2, v. 2, p. 311-20,
 port. 1867)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 595-96.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 30-1.

JACKSON, Charles Thomas. 1805-1880

- 1880 Amer. J. Sc. ser. 3, v. 20, p. 351-52. 1880.
 1881 Amer. Acad. A. & Sc. Proc. v. 16, p. 430-32. 1881.
 Pop. Sc. Mthly. v. 19, p. 404-7. July, 1881.
 1883 Bouve, T. T. C. T. J. (In Bost. Soc. Nat. Hist. Proc. v. 21, p. 40-7. 1883)
 1897 Woodworth, J. B. C. T. J. (In Amer. Geol. v. 20, p. 69-110, port.
 Aug. 1897)

Bibliography, p. 87-110; Biographies of Jackson, p. 110.

JACKSON, Halliday. 1817-1887

- 1899 Harshberger, John. H. J. (In his Botanists of Phila. 1899. p. 223-24)

JACKSON, John Barnard Swett. 1806-1879

- 1879 Amer. Acad. A. & Sc. Proc. 1879. v. 14, p. 344-52.
 1880 Bouve, T. T. J. B. S. J. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880.
 p. 199-201)
 1881 Bouve, T. T. J. B. S. J. (In Bost. Soc. Nat. Hist. Proc. v. 20, p. 124-
 28. 1881)

JAMES, Edwin. 1797-1861

- 1870 Albany Inst. Proc. v. 6, p. 282-83. 1870.
 1908 Pop. Sc. Mthly. v. 73, p. 497-98. Dec. 1908. (Spaulding)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 606-7.

JAMES, Thomas Potts. 1803-1882

- 1882 Amer. Acad. A. & Sc. Proc. 1882. v. 17, p. 405-6.
 1883 Rothrock, J. T. T. P. J. (In Amer. Phil. Soc. Proc. v. 20, p. 293-97. 1883)
 1889 Gray, Asa. T. P. J. (In his Scientific Papers. 1889. v. 2, p. 419-20)
 1899 Harshberger, John. T. P. J. (In his Botanists of Phila. 1899. p. 186-87)

JAMES, Uriah Pierson. 1811-1889

- 1889 Amer. J. Sc. ser. 3, v. 37, p. 322. 1889.
 Amer. Geol. v. 3, p. 281-87, port. May, 1889.
 Bibliography, p. 285-87.
 1890 Cincinnati Soc. Nat. Hist. Jour. v. 12, p. 5-7, port. 1890.

JAMES-CLARK, Henry, see CLARK, Henry James

JARVIS, Samuel Farmar. 1786-1851

1897 *Nat. Cycl. Amer. Biog.* v. 3, p. 216. 1897.

JAY, John Clarkson. 1808-1891

1887 Fairchild, H. L. *J. C. J.* (In his *Hist. N. Y. Acad. Sc.* 1887. p. 89, 100, port.)

1891 *Nautilus.* v. 5, p. 95-6. Dec. 1891.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 618-19.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 40.

JEFFERIS, William Walter. 1820-1906

1893 *Minerals.* v. 3, p. 104-6. June, 1893.

1906 *N. Y. Acad. Sc. Annals.* v. 18, p. 284-86. 1906.

JEFFERSON, Thomas. 1743-1826

1826 Mitchill, S. L. A discourse on the character and services of T. J., more especially as a promoter of natural and physical science, pronounced by request before the N. Y. Lyceum of Natural History, on the 11th day of October, 1826. *N. Y. Carvill*, 1826. 67 p.

1885 Luther, F. B. T. J., as a naturalist. (*In Mag. Amer. Hist.* v. 13, p. 379-90. Apr. 1885)

1901 Goode, G. B. T. J. (*In U. S. Nat. Mus. Ann. Rept.* 1897. pt. 2. Wash. 1901. p. 394-96)

Repr. from *Biol. Soc. Wash. Proc.* v. 3, p. 88-91. 1886.

1904 Sellers, H. W. Letters of T. J., to C. W. Peale, 1796-1825. (*In Pa. Mag. Hist. & Biog.* v. 28, p. 136-54, 295-319, 403-19. 1904)

1916 True, R. H. T. J., in relation to botany. (*In Scientific Mthly.* v. 3, no. 4, p. 345-60, port. Oct. 1916)

***JEFFREY, John**

1897 Coville, F. N. The itinerary of J. J., an early botanical explorer of western North America. (*In Biol. Soc. Wash. Proc.* v. 11, p. 57-60. Mar. 23, 1897)

JESSUP, Augustus Edward. 1796-1859

1860 *Acad. Nat. Sc. Phila. Proc.* v. 12, p. 1-2. 1860.

JEWETT, Charles Coffin. 1816-1868

1868 *Amer. Acad. A. & Sc. Proc.* v. 8, p. 14-5. 1868.

JEWETT, Ezekiel. 1791-1877

1877 *Amer. J. Sc. ser. 3*, v. 14, p. 80. 1877.

JOHNSON, Henry N. 1820-1879

1886 *Acad. Nat. Sc. Phila. Proc.* 1885. v. 37, p. 381-82. 1886.

JOHNSON, Hosmer. 1822-1891

1891 Allen, J. A. H. J. (*In Amer. Micros. Soc. Proc.* 1891. v. 13, p. 172-75)

JOHNSON, Samuel William. 1830-1909

1906 *Yale Sc. Mthly.* v. 12, p. 389-94, port. 1906.

1909 Wells, H. L. S. W. J. (*In Amer. J. Sc. ser. 4*, v. 28, p. 405-7. 1909) *Science.* n. s. v. 30, p. 385-89. Sept. 24, 1909.

1910 *Yale Sc. Mthly.* v. 16, p. 54-60, port. 1910.

JOHNSTON, John. 1806-1879

1880 Amer. J. Sc. ser. 3, v. 19, p. 82. 1880.

JONES, Joseph. 1833-1896

1909 Nat. Cycl. Amer. Biog. v. 10, p. 285-86, port. 1909.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 640-41.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. v. 2, p. 55-61.

JOSELYN, John

1901 Goode, G. B. J. J. (In U. S. Nat. Mus. Ann. Rept. for 1897. Wash 1901. pt. 2, p. 376)

Repr. from Biol. Soc. Wash. Proc. v. 3, p. 62-3. 1886.

JULIEN, Alexis Anastay. 1840-1919

1920 Kemp, J. F. A. A. J. (In Geol. Soc. America. Bull. v. 31, p. 81-8. 1920)

***KALM, Peter.** 1715-1779

1899 Harshberger, John. P. K. (In his Botanists of Phila. 1899. p. 77)

1901 Goode, G. B. P. K. (In U. S. Nat. Mus. Ann. Rept. for 1897. Wash. 1901. pt. 2, p. 396)

Repr. from Biol. Soc. Wash. Proc. v. 3, p. 91. 1886.

1907 Rydberg, P. A. P. K. (In N. Y. Bot. Gard. Contr. v. 5, p. 10-3. 1907)

KANE, Elisha Kent. 1820-1857

1857 Canadian Nat. & Geol. v. 2, p. 72-6. 1857.

1893 Greely, A. W. E. K. K. (In his Explorers & travellers. N. Y. 1893. p. 240-71)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 646-47.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 62-3.

KEATING, William Hippolitus. 1799-1840

1901 Lamb's Biog. Dict. U. S. v. 4, p. 481-82. 1901.

KELLOGG, Albert. 1813-1887

1887 Greene, E. L. A. K. (In Pittonia. v. 1, p. 145-51. Nov. 25, 1887)

1889 Cal. Acad. Sc. Proc. 1889. ser. 2, v. 1, p. 276-77.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 649-51.

KENNERLY, C. B. R. -1861

1862 Smith. Inst. Ann. Rept. for 1861. Wash. 1862. p. 61.

KENNICOTT, Robert. 1835-1866

1866 Amer. J. Sc. ser. 2, v. 42, p. 435-36. 1866.

1869 Chicago Acad. Sc. Trans. v. 1, p. 133-226, port. 1869.

Contains Bibliography.

KERR, Washington Caruthers. 1827-1885

1897 Nat. Cycl. Amer. Biog. v. 7, p. 450, port. 1897.

KILVINGTON, Robert. 1803-1881

1899 Harshberger, John. R. K. (In his Botanists of Phila. 1899. p. 188)

KIMBALL, James Putnam. 1836-1913

1909 *Nat. Cycl. Amer. Biog.* v. 11, p. 91-2. 1909.

KIMBER, Abigail

1899 Harshberger, John. A. K. (In his *Botanists of Phila.* 1899. p. 167)

KIN[N], Matthias

1899 Harshberger, John. M. K. (In his *Botanists of Phila.* 1899. p. 184)

KING, Clarence. 1842-1901

1902 *Amer. J. Sc. ser. 4*, v. 13, p. 224-37. 1902. (By Emmons, S. F.)

1903 *Amer. Inst. Mining Eng. Trans.* v. 33, p. 619-50. 1903. (By Raymond, R. W.)

1909 Emmons, S. F. C. K. (In *Nat. Acad. Sc. Biogr. Mem.* v. 6, p. 25-55, port. 1909)

Rd. April 18, 1879; Bibliography, p. 55.

KIRTLAND, Jared Potter. 1793-1877

1878 *Amer. J. Sc. ser. 3*, v. 15, p. 80. 1878.

Amer. Acad. A. & Sc. Proc. v. 13, p. 452-53. 1878.

1885 Whittlesey, Charles. J. P. K. (In *Mag. Western Hist.* v. 2, p. 76-81, port. May, 1885)

1886 Newberry, J. S. J. P. K. (In *Nat. Acad. Sc. Biogr. Mem.* v. 2, p. 127-38. 1886)

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 665-66.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 72-3.

KITE, William

1901 Jellett, E. C. Personal recollections of W. K., Germantown, Pa., 1901. 34 p. port.

KLIPPART, John Hancock. 1823-1878

1909 *Centennial Hist.* Columbus, Ohio. v. 1, p. 804-6. 1909. (By W. A. Taylor)

KNEELAND, Samuel, Jr. 1821-1888

1889 *Amer. Acad. A. & Sc. Proc.* v. 24, p. 438-41. 1889.

Bost. Soc. Nat. Hist. Proc. v. 24, p. 38-41. 1889.

KNIESKERN, Peter D. 1798-1871

1871 *Amer. J. Sc. ser. 3*, v. 2, p. 388-89. 1871.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 669-70.

KRIEG, David

1806 Barton, B. S. D. K. (In *Phila. Med. & Phys. Jour.* v. 2, pt. 2, p. 139-42. Sept. 1806)

KUHN, Adam. 1741-1817

1899 Harshberger, John. A. K. (In his *Botanists of Phila.* 1899. p. 88-91)

1912 Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 78-9.

Also in Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 675-76.

1914 Kelly, H. A. A. K. (In his *Some American medical botanists.* Troy, N. Y., 1914. p. 69-74, port.)

KUMLIEN, Thure. 1819-1888

1888 Auk. v. 6, p. 204-6. 1888.

Greene, E. L. T. K. (In Pittonia. v. 1, p. 250-60. 1888)

Wheeler, W. M. T. K. (In Public Mus. Milwaukee. 6th Ann. Rept. 1888)

LANDRETH, David. 1752-1836

1899 Harshberger, John. D. L. (In his Botanists of Phila. 1899. p. 91)

LANGLOIS, Auguste Barthelemy. 1832-1900

1893 Scribner, Frank Lamson. A. B. L. (In Torrey Bot. Club. Bull. v. 20, p. 326-27. 1893)

LAPHAM, Darius. -1850

1850 Amer. J. Sc. ser. 2, v. 10, p. 298. Sept. 1850.

LAPHAM, Increase Allen. 1811-1875

1876 Amer. J. Sc. ser. 3, v. 11, p. 333-34. 1876.

Hoy, P. R. I. A. L. (In Wisconsin Acad. Sc. & Letters. Trans. v. 3, p. 264-67. 1876)

See also p. 268-69.

Sherman, S. S. I. A. L. 1876. 80 p.

1877 Essex Inst. Bull. v. 8, p. 42-3. 1877.

1883 Pop. Sc. Mthly. v. 22, p. 835-40. Apr. 1883.

1894 Winchell, N. H. I. A. L. (In Amer. Geol. v. 13, p. 1-38. 1894)

Bibliography, p. 31-8 (including a list of unpublished MSS.)

LATROBE, Benjamin Henry. 1764-1820

1859 Simpson's Lives of eminent Philadelphians. 1859. p. 634-38.

1871 Stuart. B. H. L. (In his Lives & works of civil and military engineers. 1871. p. 243-56)

LAWRENCE, George Newbold. 1844-1891

1891 Foster, L. S. Bibliographies of American naturalists, no. 4. Published writings of G. N. L.: 1844-1891. Wash. 1892. (In U. S. Nat. Mus. Bull. no. 40. 11 + 124 p.)

Biography, pref. 11 p.

1895 Science. n. s. v. 1, p. 268-69. 1895.

1896 Elliot, D. G. G. N. L. (In Auk. v. 13, no. 1, p. 1-10, port. 1896)

LAWSON, Alexander. 1772-1846

1904 Ward, Townsend. A. W. (In Penn. Mag. Biog. & Hist. v. 28, p. 204-8. 1904)

LAWSON, John.

1918 Gee, Wilson. J. L. (In Univ. S. C. Bull. no. 72, p. 5-8. Sept. 1918)

LEA, Isaac. 1792-1886

1876 A catalogue of the published works of I. L.: 1817-1876. Phila. Collins, 1876. 22 p.

1885 Scudder, S. H. . . . The published writings of I. L. Wash. 1885. 59 + 278 p. (In U. S. Nat. Mus. Bull. no. 23)

Biographical sketch, pref. p. 7-59.

1887 Pop. Sc. Mthly. v. 31, p. 404-11, port. July, 1887.

- Leidy, Joseph. I. L. (In Amer. Phil. Soc. Proc. v. 24, p. 400-3. 1877)
 Amer. J. S. ser. 3, v. 33, p. 85-6. 1887.
- 1888 Essex Inst Bull. v. 19, p. 71-2. 1888.
- Dall, W. H. I. L. (In Biol. Soc. Wash. Proc. v. 4, p. 118-20, port. 1888)
- 1889 Cal. Acad. Sc. Proc. ser. 2, v. 1, p. 272-73. 1889.
- 1896 Youmans, W. J. I. L. (In his *Pioneers of science in America*. p. 260-69. 1896)
- 1899 Benjamin, Marcus. I. L. (In Amer. Assoc. Adv. Sc. Proc. v. 48, p. 424-26, port. 1899)
- I. L. (In Science. n. s. v. 10, p. 675-76. Nov. 10, 1899)

LEA, Matthew Carey. 1823-1897

- 1897 Amer. J. Sc. ser. 4, v. 3, p. 428. 1897.
- 1905 Barker, G. F. M. C. L. (In Nat. Acad. Sc. Biogr. Mem. v. 5, p. 155-207. 1905)
- Bibliography, p. 204-7; Rd. Apr. 21, 1903.

LEAVENWORTH, Melines Conklin. 1796-1862

- 1863 Amer. J. Sc. ser. 2, v. 35, p. 306. Mar. 1863.
- 1867 Conn. Med. Soc. Proc. ser. 2, v. 2, p. 269-72. 1867. (By Rockwell, P. G.)
- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 635-86.

LE BARON, William. 1814-1876

- 1877 Amer. Nat. v. 11, p. 56. 1877.
- 1885 Goding, F. W. W. L. (In Entomologica Americana. Brooklyn, N. Y. Oct. 1885. v. 1, p. 122-25)
- Bibliography, p. 125.
- 1891 Forbes, S. A. An analytical list of the entomological writings of W. L., second state entomologist of Illinois, 1850-1874. Springfield, Ill., 1891. 36 p. (In Illinois. 17th Ann. Rept. State Entom. appx.)

LE CONTE, John. 1818-1891

- 1891 Amer. J. Sc. ser. 3, v. 41, p. 525-26. June, 1891.
- 1893 Cal. Acad. Sc. Proc. ser. 2, v. 3, p. 361-63. 1893.
- 1895 Le Conte, Joseph. J. L. (In Nat. Acad. Sc. Biogr. Mem. v. 3, p. 369-93. 1895)
- Bibliography, p. 390-93.

LE CONTE, John Eatton. 1784-1860

- 1861 Amer. J. Sc. ser. 2, v. 31, p. 303, 462-63. 1861.
- 1881 Henshaw, Samuel. Index to the Coleoptera described by J. E. L. (In Amer. Ent. Soc. Trans. v. 9, p. 271-72. Oct. 1881)
- 1883 Gray, Asa. J. E. L. (In Bot. Gaz. v. 8, no. 4, p. 197-99. Apr. 1883)
- 1889 Graham, Mary, and Greene, E. L. Reminiscences of Major J. E. L. (In Pittonia. v. 1, p. 303-11. May, 1889)
- 1899 Harshberger, John. J. E. L. (In his *Botanists of Phila.* 1899. p. 149-51)
- 1917 Barnhart, J. H. J. E. L. (In Amer. Midland Nat. Notre Dame, Indiana, Sept. 1917. v. 5, no. 5, p. 135-38)

LE CONTE, John Lawrence. 1825-1883

- 1878 Henshaw, Samuel. The entomological writings of J. L. L. Cambridge, Mass., 1878. 11 p. (In Dimmock's Special Bib. no. 1)
- 1881 ——— Index to the Coleoptera described by J. L. L. (In Amer. Ent. Soc. Trans. v. 9, p. 270. Oct. 1881)

- 1883 Horn, G. H. J. L. L. (In *Science*. v. 2, p. 783-86, port. Dec. 21, 1883)
 1884 Amer. Acad. A. & Sc. Proc. v. 19, p. 511-16. 1884.
 Amer. Phil. Soc. Proc. v. 21, p. 290-99. 1884. (By Horn, G. H.)
 1886 Scudder, S. H. J. L. L. (In *Nat. Acad. Sc. Biogr. Mem.* v. 2, p. 261-93. 1886)

Rd. Apr. 17, 1884.

Repr. in *Amer. Ent. Soc. Trans.* v. 11, appx. 28 p. port. Aug. 1884.

- 1899 Benjamin, Marcus. J. L. L. (In *Amer. Assoc. Adv. Sc. Proc.* v. 48, p. 450-52. 1899)

Repr. in *Science*. n. s. v. 10, p. 761-62. Nov. 24, 1899.

LE CONTE, Joseph. 1823-1901

- 1901 Hilgard, E. W. J. L. (In *Nat. Acad. Sc. Biogr. Mem.* v. 6, p. 147-218. 1901)

Bibliography, p. 212-18; Rd. Apr. 18, 1907.

- 1903 Le Conte, Joseph. *Autobiography*; ed. by W. D. Armes. N. Y. Appleton, 1903. 17 + 337 p. illus. pl. port.

- 1908 Sierra Club. *Bull.* 1908. p. 25-31, port.

- 1915 Fairchild, H. L. J. L. (In *Geol. Soc. Amer. Bull.* v. 26, p. 47-57, port. 1915)

Bibliography, p. 54-7.

LE CONTE, Lewis. 1782-1838

- 1909 *Nat. Cycl. Amer. Biog.* v. 11, p. 105. 1909.

LEE, Charles Alfred. 1801-1872

- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 690.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 89-91.

LEIDY, Joseph. 1823-1891

- 1880 Nolan, E. J. J. L. (In *Pop. Sc. Mthly.* v. 17, p. 684-91, port. Sept. 1880)

- 1891 *Amer. Nat.* v. 25, p. 408-10. 1891.

Amer. J. Sc. ser. 3, v. 41, p. 523-25. 1891.

Allen, Harrison. *Prof. J. L.: his labors in the field of vertebrate anatomy.* (In *Science*. v. 18, p. 274-76. 1891)

Chapman, H. C. J. L. (In *Acad. Nat. Sc. Phila. Proc.* 1891. v. 43, p. 342-88)

Chronological bibliography, p. 370-88.

Eyerman, John. *A catalogue of the palaeontological publications of J. L.* (In *Amer. Geol.* v. 8, p. 333-42. 1891)

- 1892 *Amer. Acad. A. & Sc. Proc.* 1892. v. 27, p. 437-42.

Ruschenberger, W. S. W. J. L. (In *Amer. Phil. Soc. Proc.* v. 30, p. 135-84, port. 1892)

Bibliography, p. 168-84.

Frazer, Persifor. J. L. (In *Amer. Geol.* v. 9, p. 1-5, port. Jan. 1892)

Hunt, William. J. L.: his university career. *Phila.* 1892. 60 p. port.

Rd. before Medical Dept. of Univ. of Pa.

- 1904 Leidy, Joseph. *Researches in helminthology and parasitology, with bibliography of his contributions to science, arranged and edited by J. L., Jr.* Wash. 1904. 281 p. (In *Smith. Inst. Misc. Coll.* v. 46)

Bibliography, p. 249-73.

- 1907 *Science*. n. s. v. 26, p. 812-15. 1907.

- 1913 Minot, C. S. A tribute to J. L. (In *Science*. n. s. v. 37, p. 809-14. 1913)
 Osborn, H. F. J. L. (In *Nat. Acad. Sc. Biogr. Mem.* v. 7, p. 339-94. 1913)
 Bibliography, p. 370-94; Rd. April, 1912.
 Biographies & bibliographies of J. L., p. 395-96.
- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 692-96.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 92-4.
- 1924 ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA. The Joseph Leidy Commemorative Meeting held in Philadelphia, December 6, 1923. Phila. 1924. 87 p. port. (In its *Proc.* v. 75, appx.)

p. 3-9. J. L., the founder of American parasitology, by H. B. Ward.
 p. 22-7. General estimate of Leidy's influence upon scientific thought
 p. 28-35. Zoological work, by H. S. Jennings.
 p. 36-43. Palaeontological and geological work, by W. B. Scott.
 p. 43-8. J. L., as a botanist, by Witmer Stone.
 p. 49-52. Mineralogical work, by F. W. Clarke.
 p. 54-61. J. L., the founder of vertebrate palaeontology in America, by H. F. Osborn.

Repr. in *Science*. n. s. v. 59, p. 173-76. Feb. 22, 1924.

See also p. 398-9. May 2, 1924.

p. 61-72 Reminiscences of a prosector and appreciation of Leidy's work as an anatomist, by G. E. De Schweinitz.

p. 73-87. Leidy and his influence on medical science, by H. A. Hare.

Scientific Mthly. v. 18, p. 422-32. Apr. 1924. (The J. L. Centenary)

Excerpts from the preceding.

*LE PAGE DU PRATZ. -1775

- 1893 Sargent's *Silva N. A.* v. 5, p. 17. 1893.

LESLEY, John Peter. 1819-1903

- 1884 *Science*. v. 4, p. 190-92. 1884.
 Pop. Sc. Mthly. v. 25, p. 693-95, port. Sept. 1884.
- 1898 *Amer. Phil. Soc. Proc.* v. 37, p. 165-69. 1898. (By Ingham, W. A.)
- 1903 Frazer, Persifor. J. P. L. (In *Amer. Geol.* v. 32, p. 133-36, port. 1903)
 Science. n. s. v. 18, p. 1-3. July 3, 1903. (By Stevenson, J. J.)
- 1904 *Geol. Soc. America. Bull.* v. 15, p. 532-41. 1904. (By Stevenson, J. J.)
 Bibliography, p. 538-41.
- Amer. Inst. Mining Eng. Trans.* v. 34, p. 726-39. 1904. (By Lyman, B. S.)
- 1906 Chance, H. M. J. P. L. (In *Amer. Phil. Soc. Proc.* v. 45, pref. p. 1-14. 1906)
- 1909 Life and letters of J. P. L. N. Y. Putnam, 1909. 2 v. illus. pl. port.
- 1915 Davis, W. M. J. P. L. (In *Nat. Acad. Sc. Biogr. Mem.* v. 8, p. 155-240. 1915)

LESQUEREUX, Charles Leo. 1806-1889

- 1887 *Pop. Sc. Mthly.* v. 30, p. 835-40. Apr. 1887. (By McCabe, L. R.)
- 1889 *Amer. J. Sc.* ser. 3, v. 38, p. 499-500. 1889.
 Amer. Acad. A. & Sc. Proc. 1890. v. 25, p. 320-24.
- Lesley, J. P. C. L. L. (In *Amer. Phil. Soc. Proc.* v. 28, p. 65-70, port. 1890)
- 1890 Orton, Edward. C. L. L. (In *Amer. Geol.* v. 5, p. 284-96, port. 1890)
 Barnes, C. B. C. L. L. (In *Bot. Gaz.* v. 15, no. 1, p. 16-9. Jan. 1890)

- 1891 Knowlton, F. H. C. L. L. (In U. S. Geol. Surv. Monograph. v. 17, p. 15-8. 1891)
 1895 Lesley, J. P. C. L. L. (In Nat. Acad. Sc. Biogr. Mem. v. 3, p. 187-212. 1895)
 Rd. Apr. 16, 1890.
 1896 Youmans, W. J. C. L. L. (In his *Pioneers of science in America*. 1896. p. 458-63)

LE SUEUR, Charles Alexandre. 1780-1846

- 1849 Ord, George, C. A. L. (In *Amer. J. Sc.* ser. 2, v. 7, p. 189-216. Sept. 1849)
 Bibliography, p. 214-16.
 1888 Dall, W. H. C. A. L. (In *Biol. Soc. Wash. Proc.* v. 4, p. 102-3. 1888)
 1896 Youmans, W. J. C. A. L. (In his *Pioneers of science in America*. 1896. p. 128-39)
 Note sur l'oeuvre ichthyologique de C. A. L. (In *Soc. Philomathique de Paris. Extrait de Bull.* 1896. v. 8, p. 15-33, 34 pl. (By L. Vaillant)
 1901 Goode, G. B. C. A. L. (In U. S. Nat. Mus. *Ann. Rept. for 1897.* pt. 2. Wash. 1901. p. 448-49)
 1904 Hamy, E. T. C. A. L.: *Les voyages du naturaliste, Ch. Alexandre Le Sueur dans L'Amerique du Nord, 1815-1837.* Paris, 1904. (In *Soc. des Americanistes de Paris. Jour.* v. 5, 111 p. illus. pl. 1904)
 Bibliography, p. 105-8.

LEWIS, Grace Anna. 1821-1912

- 1899 Harshberger, John. G. A. L. (In his *Botanists of Phila.* 1899. p. 233-36)

LEWIS, Meriwether. 1774-1809

- 1814 Jefferson, Thomas. M. L. Phila. 1814. (In *History of Lewis & Clark Exped.* ed. by Paul Allen. pref. p. 10-20)
 1893 Coues, Elliott. M. L. (In his *History of Lewis & Clark Exped.* N. Y. 1893. v. 1, pref. p. 15-62)
 Greely, A. W. M. L. (In his *Explorers & travellers.* N. Y. 1893. p. 105-62)
 1901 Lighton, W. R. Lewis & Clark. Bost. Houghton, 1901. 159 p. port.

LEWIS, Winslow, Jr. 1799-1875

- 1877 Essex Inst. Bull. v. 8, p. 42. 1877.

L'HERMINIER, Felix Louis. 1779-1833

- 1917 Barnhart, J. H. F. L. L. (In N. Y. Bot. Gard. *Jour.* v. 18, p. 241, footnote. 1917)
 See also *Charleston Mus. Bull.* v. 2, p. 29-30. 1906. & *Charleston Mus. Contributions.* no. 4, p. 13-5. 1923.

LIEBER, Oscar Montgomery. 1830-1862

- 1891 Holmes, J. A. O. M. L. (In *Elisha Mitchell Sc. Soc. Jour.* v. 7, pt. 2, p. 115-16. 1891)
 1903 Lamb's Biog. Dict. U. S. v. 5, p. 61. 1903.
 1906 Nat. Cycl. Amer. Biog. v. 13, p. 170-71. 1906.

LINCECUM, Gideon. 1789-1873

- 1904 Autobiography. (In *Miss. Hist. Soc. Publications.* v. 8, p. 443-519. 1904)

LINCOLN, Benjamin. 1733-1810

- 1881 Memorial Hist. Boston. 1881. v. 4, p. 517.

LINDEN, Charles. 1832-1888

1888 Amer. Nat. v. 22, p. 566. 1888.

1907 Buffalo Acad. Nat. Sc. Bull. v. 8, no. 6, p. 8-10, port. 1907.

LINDHEIMER, Ferdinand. 1801-1879

1907 Missouri Bot. Gard. Rept. v. 18, p. 127-41, port. 1907.

Plantae Lindheimerianae, by J. W. Blankinship, p. 123-223. (Part 3)

***LINNAEUS, Carolus (Carl von Linné) 1707-1778**

1821 Smith, J. E., ed. A selection of the correspondence of Linnaeus and other naturalists from the original MSS. London, Longman, 1821. 2 v.

1855 Gray, Asa, ed. A selection of the correspondence of Linnaeus and other naturalists from the original MSS. by Sir J. E. Smith . . . ed. by Asa Gray. Bost. 1855. (In Amer. Acad. A. & Sc. Mem. n. s. v. 5, pt. 2, p. 179-234)

1907 Rydberg, P. A. Linnaeus and American botany. (In Science. n. s. v. 26, p. 65-71. 1907)

See also N. Y. Acad. Sc. Annals. v. 18, p. 32-40. 1903.

1908 Lucas, F. A. Linnaeus and American natural history. N. Y. Jan. 1908. (In N. Y. Acad. Sc. Annals. v. 18, no. 1, p. 52-7)

Allen, J. A. Linnaeus as a zoologist. N. Y. Jan. 1908. (In N. Y. Acad. Sc. Annals. v. 18, p. 9-19)

Also in Science. n. s. v. 25, p. 953-61. June 21, 1907.

1912 Greene, E. L. Carolus Linnaeus. Phila. Sower, 1912. 91 p. port. pl.

LINSLEY, James Harvey. 1787-1843

1844 Amer. J. Sc. v. 46, p. 216. Jan. 1844.

1901 Goode, G. B. J. H. L. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2. Wash. 1901. p. 282, port. only)

LINTNER, Joseph Albert. 1822-1898

1899 Felt, E. P. Memorial of the life and entomologic work of J. A. L. (In N. Y. State Mus. Bull. v. 24, p. 306-611, port. 1899)

Repr. in N. Y. State Mus. Ann. Rept. for 1898. Albany, 1900. v. 52, p. 301-611, port.

LITTON, Abram. 1814-1901

1903 Broadhead, G. C. A. L. (In Acad. Sc. St. Louis. Trans. v. 12, p. 24-7. (pref.). 1903)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 709.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 102-3.

LOBB, William. 1809-1863

1911 Eastwood, Alice. Explorations of William Lobb. Reno, Nevada, Sept. 1911. (In Muhlenbergia. v. 7, no. 9, p. 100-3)

LOCKE, John. 1792-1856

1856 Amer. J. Sc. ser. 2, v. 22, p. 301-2. Sept. 1856.

1885 Whittlesey, Charles. J. L. (In Mag. Western Hist. v. 2, p. 84-5, port. May, 1885)

1894 Winchell, N. H. J. L. (In Amer. Geol. v. 14, p. 341-56, port. 1894)

Chronological bibliography, for 1819-1857, p. 354-56.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 710-11.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 105-6.

***LOEW, Hermann. 1807-1879**

See OSTEN-SACKEN, C. R.

LOGAN, James. 1674-1751

1860 Gardener's Mthly. v. 2, p. 323-24. Nov. 1860.

1894 Harshberger, John. J. L. (In Bot. Gaz. v. 19, p. 307-12. Aug. 1894)

An early contributor to the doctrine of sex in plants.

1899 ——— J. L. (In his Botanists of Phila. 1899. p. 41-2)

LONG, Stephen Harriman. 1784-1864

1909 Nat. Cycl. Amer. Biog. v. 11, p. 365. 1909.

LOWELL, John Amory. 1798-1881

1882 Amer. Acad. A. & Sc. Proc. v. 17, p. 408-11. 1882.

LOWELL, John. 1744-1802

1881 Memorial Hist. Boston. 1881. v. 4, p. 518.

LYMAN, Chester Smith. 1814-1890

1890 Amer. J. Sc. ser. 3, v. 39, p. 245-46. 1890.

LYMAN, Theodore. 1833-1897

1899 Amer. Acad. A. & Sc. Proc. v. 34, p. 656-63. 1899.

1905 Bowditch, H. P. T. L. (In Nat. Acad. Sc. Biogr. Mem. v. 5, p. 141-53, port. 1905)

Rd. before Academy, April 23, 1903.

LYON, John. —1818

1893 Sargent's Silva N. A. v. 5, p. 80. 1893.

1899 Harshberger, John. J. L. (In his Botanists of Phila. 1899. p. 133)

LYON, Sidney S. 1808-1872

1872 Amer. Nat. v. 6, p. 505-6. 1872.

MACBRIDE, James. 1874-1817

1909 Nat. Cycl. Amer. Biog. v. 11, p. 203. 1909.

1914 Kelly, H. A. J. M. (In his Some American medical botanists. Troy, N. Y., 1914. p. 118-19)

1918 Gee, William. J. M. (In Univ. S. C. Bull. no. 72, p. 33-4. Sept. 1918)

MC CALL, George Archibald. 1802-1868

1913 Stone, Witmer. G. A. M. (In Cassinia. v. 16, p. 1-6, port. Feb. 1913)

MC CRADY, John. 1831-1881

1909 Nat. Cycl. Amer. Biog. v. 11, p. 419-20. 1909.

MACLURE, William. 1763-1840

1841 Morton, S. G. A memoir of W. M., late president of the Acad. Nat. Sc. Phila. Phila. 1841. 37 p. (In Acad. Nat. Sc. Phila. Proc. v. 1, appx.)

Bibliography, p. 35-7.

Repr. in Amer. J. Sc. v. 47, no. 1, p. 1-17. July, 1844.

2d ed., Memoir. Phila. 1844. 34 p.

- 1906 Merrill, G. P. W. M. (In U. S. Nat. Mus. Ann. Rept. 1904. Wash. 1906. p. 217-19, port.)

***MAC GILLIVRAY, William. 1796-1852**

- 1910 MacGillivray, William. W. M., with a scientific appreciation by J. Arthur Thomson. 1910. 15 + 222 p. 12 pl. port.

Rev. in Auk. v. 27, p. 474-76. Oct. 1910.

M'MAHON, Bernard. 1775-1816

- 1895 Sargent's Silva N. A. v. 7, p. 86. 1895.

- 1899 Harshberger, John. B. M. (In his Botanists of Phila. 1899. p. 117-19)

- 1915 Standard Cycl. Hort. ed. by L. H. Bailey. 1915. v. 3, p. 1586.

MC CREE, James Fergus. 1794-1869

- 1920 N. Y. Bot. Gard. Jour. v. 21, p. 167, footnote. 1920. (By J. H. Barnhart)

MACWILLIAMS, Alexander. 1775-1850

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 753-54.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 143.

MAISCH, John Michael. 1831-1893

- 1894 Amer. Phil. Soc. Proc. v. 33, p. 345-52. 1894.

Contains Bibliography.

- 1899 Harshberger, John. J. M. M. (In his Botanists of Phila. 1899. p. 273)

MALLET, John William. 1832-1912

- 1913 Dunnington, F. P. J. W. M. (In Amer. Chem. Soc. Jour. v. 35, p. 40-4. 1913)

———— J. W. M. (In Amer. Chem. Jour. v. 49, p. 69-73. 1913)

MANN, Horace. 1844-1868

- 1868 Brigham, W. T. H. M. (In Bost. Soc. Nat. Hist. Proc. v. 12, p. 152-55. 1868)

- 1869 Essex Inst. Bull. v. 1, p. 25-31, 41-50. 1869.

MANROSS, Newton Spaulding. 1825-1862

- 1862 Amer. J. Sc. ser. 2, v. 34, p. 452. 1862.

- 1909 Nat. Cycl. Amer. Biog. v. 11, p. 63. 1909.

MAPES, James Jay. 1806-1866

- 1887 Fairchild, H. L. J. J. M. (In his History N. Y. Acad. Sc. 1887. p. 90)

MARCOU, Jules. 1824-1898

- 1885 Marcou, J. B. The writings of Jules Marcou. Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 241-44)

- 1898 Amer. J. Sc. ser. 4, v. 5, p. 398. 1898.

- 1899 Amer. Acad. A. & Sc. Proc. 1899. v. 34, p. 651-56.

Soc. Geol. de France. Bull. v. 27, p. 153-54. 1899.

MARCY, Oliver. 1820-1899

- 1899 Auk. v. 16, p. 211. Apr. 1899.

Crook, A. R. O. M. (In Amer. Geol. v. 24, p. 67-72. Aug. 1899.

- 1900 ——— O. M. (In Geol. Soc. America. Bull. v. 11, p. 537-42. 1900)

MARSH, Dexter. 1806-1853

- 1853 *Annals Sc.* v. 1, p. 242. Sept. 15, 1853.
From the New York Times.

MARSH, George Perkins. 1801-1882

- 1882 *Amer. J. Sc.* ser. 3, v. 24, p. 240. 1882.
1883 *Amer. Acad. A. & Sc. Proc.* v. 18, p. 447-57. 1883.
1888 Marsh, C. C. *Life and letters of G. P. M.* N. Y. 1888.
1892 Koopman, H. L. *Bibliography of G. P. M.* 1892.
1909 Davis, W. M. *G. P. M. (In Nat. Acad. Sc. Biogr. Mem.* v. 6, p. 71-80. 1909)
Rd. April 18, 1905.

MARSH, Othniel Charles. 1831-1899

- 1878 *Pop. Sc. Mthly.* v. 13, p. 612-17. Sept. 1878. (By Grinnell, G. B.)
Bibliography, p. 616-17. Portrait.
1893 *Scientific publications of O. C. M.* New Haven, 1893. 15 p. (In *Bibliographies of Officers of Yale Univ.*)
1899 Beecher, C. E. *O. C. M. (In Amer. J. Sc.* ser. 4, v. 7, p. 403-28. 1899)
Bibliography, p. 420-28.
Amer. Geol. v. 24, p. 135-57, port. 1899. (By C. E. Beecher).
Bibliography, p. 147-57.
Jour. Geol. v. 7, p. 401-4. 1899.
Science. n. s. v. 9, p. 561-65, port. Apr. 2, 1899. (By Wortman, J. L.)
1900 *Geol. Soc. America. Bull.* v. 11, p. 521-37. 1900. (By Beecher, C. E.)
Bibliography, p. 529-37.
1910 Grinnell, G. B. *O. C. M. (In Jordan, D. S. Leading American men of science.* 1910. p. 283-312)

MARSHALL, Humphry. 1722-1801

- 1849 Darlington, William. *Memorials of Bartram and Marshall.* 1849.
Marshall's Memorials, p. 479-585.
Rev. in *Amer. J. Sc.* ser. 2, v. 9, p. 85-105. Jan. 1850.
1899 Harshberger, John. H. M. (In his *Botanists of Phila.* 1899. p. 77-85)
1913 Chester County Historical Society. *Exercises in memory of Humphry Marshall and William Darlington, at Marshallton, Pa., September 27, 1913.* 34 p. pl. (In its *Bulletin*)
p. 6-12, The Botanic work of H. M., and W. D., by John Harshberger.

MARSHALL, Moses. 1758-1813

- 1899 Harshberger, John. M. M. (In his *Botanists of Phila.* 1899. p. 97-107)
1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 763-64.
Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 149-50.

MATHER, William Williams. 1804-1859

- 1860 *Amer. Assoc. Adv. Sc. Proc.* v. 13, p. 3-4. 1860.
1883 *New England Hist. Genealog. Soc. Mem. Biog.* v. 3, p. 339-55.
1885 Whittlesey, Charles. W. W. M. (In *Mag. Western Hist.* v. 2, p. 73-6, port. May, 1885)
1896 *Pop. Sc. Mthly.* v. 49, p. 550-53, port. 1896.
Youmans, W. J. W. W. M. (In his *Pioneers of science in America.* 1896. p. 402-9)

- 1897 Hitchcock, C. H. W. W. M. (In Amer. Geol. v. 19, p. 1-15, port. Jan. 1897)

Bibliography, p. 7-15.

- 1906 Merrill, G. P. W. W. M. (In U. S. Nat. Mus. Ann. Rept. 1904. Wash. 1906. p. 333-35, port.)

MEAD, Samuel Barnum. 1798-1880

- 1880 Bot. Gaz. v. 5, no. 12, p. 150. Dec. 1880.

MEADE, William

- 1833 Amer. J. Sc. v. 25, p. 215-16. Oct. 1833.

MEASE, James. 1771-1846

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 774-75.

MEEHAN, Thomas. 1826-1901

- 1899 Harshberger, John. T. M. (In his Botanists of Phila. 1399. p. 249-56, port.)

- 1902 Meehan's Mthly. v. 10, p. 13-9. 1902.

- 1915 Standard Cycl. Hort. ed. by L. H. Bailey. 1915. v. 3, p. 1587-88, port.

MEEK, Fielding Bradford. 1817-1876

- 1877 Amer. Acad. A. & Sc. Proc. v. 12, p. 321-23. 1877.

White, C. A. F. B. M. (In Amer. J. Sc. ser. 3, v. 13, p. 169-71. 1877)
Amer. Nat. v. 11, p. 122-23. 1877)

- 1885 Marcou, J. B. Published writings of F. B. M. Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 11-112)

Biographical sketch, p. 11-2.

- 1896 White, C. A. F. B. M. (In Amer. Geol. v. 18, p. 337-50. 1896)

Bibliography, p. 343-50.

- 1902 White, C. A. F. B. M. (In Nat. Acad. Sc. Biogr. Mem. v. 4, p. 75-91. 1902)

Rd. Nov. 1896; Bibliography, p. 80-91.

MEIGS, Charles Delucena. 1792-1869

- 1873 Amer. Phil. Soc. Proc. v. 13, p. 170-79. 1869. (By Bell, John)

MEIGS, James Aitken. 1829-1879

- 1880 Hamilton, George. J. A. M. (In Med. Soc. Pa. Trans. 1880. p. 1-22)

- 1900 Nat. Cycl. Amer. Biog. v. 8, p. 218-19. 1900.

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 778-79.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 160-61.

MELlichamp, Joseph Hanson. 1829-1903

- 1918 Gee, Wilson. J. H. M. (In Univ. S. C. Bull. no. 72, p. 49-52, port. Sept. 1918)

MELSHEIMER, Frederick Ernst. 1782-1873

- 1874 Canadian Ent. v. 6, p. 39-40. 1874.

Naturaliste Canadien. v. 16, p. 19-20. 1874.

MELSHEIMER, Frederick Valentine. 1749-1814

- 1846 Amer. J. Sc. ser. 2, v. 1, p. 18-9. Nov. 1846.

- 1903 Prowell, G. R. F. V. M. (In Hist. Soc. York Co., Pa. Proc. & Coll. v. 1, no. 2, p. 17-26. 1903)

***MICHAUX, Andre. 1746-1802**

- 1883 Bot. Gaz. v. 8, p. 181-83. Mar. 1883.
 1884 Rusby, H. H. M.'s New Jersey Garden. (In Torrey Bot. Club. Bull. v. 11, p. 88-90. 1884)
 1904 Thwaites, R. G. Early Western Travels. v. 3, p. 11-9. 1904.
 1911 Coker, W. C. Garden of A. M. (In Elisha Mitchell Sc. Soc. Jour. v. 27, p. 65-72, port. 1911)
 1915 Sargent, C. S. Washington & Michaux. (In Rhodora. v. 17, p. 49-50. Mar. 1915)

MICHAUX, Francis Andre. 1770-1855

- 1857 Durand, Elias. F. A. M. (In Amer. J. Sc. v. 74 (ser. 2, v. 24), p. 161-77. Sept. 1857)
 1859 Amer. Phil. Soc. Proc. v. 6, p. 223-27. 1859.
 Rd. Dec. 5, 1856.
 1860 Durand, Elias. F. A. M. (In Amer. Phil. Soc. Trans. v. 11, pref. p. 17-28. 1860)

MICHEL, William Myddelton. 1822-1894

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 788-89.

MICHENER, Ezra. 1794-1887

- 1899 Harshberger, John. E. M. (In his Botanists of Phila. 1899. p. 178-80)
 1917 Shear, C. L., and Stevens, N. E. The botanical work of E. M. (In Torrey Bot. Club. Bull. v. 44, p. 547-58. Dec. 27, 1917)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 789.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 167-68.

MILES, Manly. 1826-1906

- 1898 Michigan Ornith. Club. Bull. v. 2, p. 13-4, port. Apr. 1898.
 1899 Pop. Sc. Mthly. v. 54, p. 834-41, port. Apr. 1899.
 1901 Michigan Acad. Sc. Rept. for 1900. 1901. p. 101-7, port.
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 790-91.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 169-70.

MILLS, James Ellison. 1834-1901

- 1903 Geol. Soc. America. Bull. v. 14, p. 512-17, port. 1903. (By Branner, J. C.)
 Bibliography, p. 516-17.

MITCHELL, Elisha. 1793-1857

- 1858 A memoir of the Rev. E. M., late professor of chemistry, mineralogy and geology in the University of N. C. Chapel Hill, N. C. 1858. 73 p. port.
 1884 Elisha Mitchell Sc. Soc. Jour. v. 1, p. 9-18. 1884. (By Charles Phillips)
 1891 Pop. Sc. Mthly. v. 38, p. 398-406, port. Jan. 1891.
 1896 Youmans, W. J. E. M. (In his Pioneers of science in America. 1896. p. 279-89)

MITCHELL, John. 1680-1772

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 801.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 178-79.

MITCHELL, Silas Weir. 1829-1914

- 1914 Memorial addresses and resolutions. 1914.
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 802-5.
 Burr, C. W. . . . S. W. M.: physician, man of science, man of letters, man of affairs . . . Phila. College of Physicians of Phila., 1920. 31 p.

MITCHILL, Samuel Latham. 1764-1831

- 1859 Francis, J. W. S. L. M.: reminiscences. N. Y. 1859.
 1887 Fairchild, H. L. S. L. M. (In his Hist. N. Y. Acad. Sc. 1887. p. 57-64)
 1891 Pop. Sc. Mthly. v. 38, p. 691-98, port. Mar. 1891.
 1896 Youmans, W. J. S. L. M. (In his Pioneers of science in America. 1896. p. 71-80)
 1901 Goode, G. B. S. L. M. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2. Wash. 1901. p. 422-24)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 806-7.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 179-81, port.

MOHR, Charles Theodore. 1824-1901

- 1901 Smith, E. A. C. T. M. (In Torrey Bot. Club. Bull. v. 28, p. 599-604. Nov. 1901)
 ——— C. T. M. (In Geol. Surv. Alabama. Montgomery, Ala., Oct. 1901. pref. p. 5-12)
 Repr. in U. S. Nat. Herbarium. Contr. v. 6, 1901.

MORGAN, Lewis Henry. 1818-1881

- 1882 Amer. Acad. A. & Sc. Proc. v. 17, p. 429-36. 1882.
 Contains Bibliography, p. 435-36.
 1909 Holmes, W. H. L. H. M. (In Nat. Acad. Sc. Biogr. Mem. v. 6, p. 219-39. 1909)
 Bibliography, p. 237-39.
 Rd. Nov. 20, 1907.

MORRIS, John Gottlieb. 1803-1895

- 1895 Entomological News. v. 6, p. 273-74, port. Nov. 1895.
 1897 Nat. Cycl. Amer. Biog. v. 3, p. 61. 1897.
 1910 Pop. Sc. Mthly. v. 76, p. 471, port. 1910.

MORSE, Edward Sylvester. 1838-

- 1878 Pop. Sc. Mthly. v. 13, p. 102-4, port. May, 1878.

MORTON, Samuel George. 1799-1851

- 1851 Meigs, C. D. A memoir of S. G. M., late president of the Academy of Natural Sciences of Philadelphia. Phila., Collins, 1851. 48 p.
 Extracts in Amer. J. Sc. ser. 2, v. 13, p. 153-78. March, 1852.
 Amer. J. Sc. ser. 2, v. 12, p. 144-46. July, 1851.
 1852 Acad. Nat. Sc. Phila. Proc. v. 5, p. 203-4. 1852.
 1888 Dall, W. H. S. G. M. (In Biol. Soc. Wash. Proc. v. 4, p. 105-6. 1888)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 822-25.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 192-97.

MUDGE, Benjamin Franklin. 1817-1879

- 1880 Amer. Nat. v. 14, p. 70-1. 1880.

- 1899 Williston, S. W. B. F. M. (In Amer. Geol. v. 23, p. 339-45, port. 1899)
Bibliography, p. 344-45.
- 1906 Merrill, G. P. B. F. M. (In U. S. Nat. Mus. Ann. Rept. 1904. Wash. 1906.
p. 525-26)

MUHLENBERG, Gotthilf Heinrich Ernst. 1753-1815

- 1843 Darlington, William. Reliquianae Baldwinianae. Phila. 1843.
p. 15-184 give correspondence between Baldwin & M.
- 1886 Maisch, J. M. G. H. E. M. (In Pharm. Rundschau. June, 1886)
- 1894 Pop. Sc. Mthly. v. 45, p. 689-98, port. Sept. 1894.
- 1896 Youmans, W. J. G. H. E. M. (In his Pioneers of science in America.
1896. p. 58-70)
- 1899 Harshberger, John. G. H. E. M. (In his Botanists of Phila. 1899. p. 92-7,
port.)
- 1901 Goode, G. B. G. H. E. M. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2.
Wash. 1901. p. 417-18)

MURRISH, John M. 1820-1886

- 1906 Merrill, G. P. J. M. M. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash.
1906. p. 706-7)

NEVIUS, Reuben Denton. 1827-1913

- 1900 Honeyman. Johannes Nevius and his descendants. 1900. p. 584, port.
- 1914 Torrey. v. 14, p. 19. 1914.

NEWBERRY, John Strong. 1822-1892

- 1885 Marcou, J. B. Writings of J. S. N. . . . Wash. 1885. (In U. S. Nat. Mus.
Bull. no. 30, p. 245-46)
- 1892 Fairchild, H. L. J. S. N. (In N. Y. Acad. Sc. Trans. v. 12, p. 152-73,
port. 1892-93)
Kemp, J. F. Bibliography of J. S. N. (In N. Y. Acad. Sc. Trans. v. 12,
p. 173-86. 1892-93)
Pumpelly, Raphael. J. S. N. (In Amer. Acad. A. & Sc. Proc. v. 28 (n. s.
v. 20), p. 394-98. 1892-93)
- 1893 Stevenson, J. J. J. S. N. (In Amer. Geol. v. 12, p. 1-25, port. 1893)
Bibliography, p. 15-25.
Britton, N. L. J. S. N. (In Torrey Bot. Club. Bull. v. 20, p. 89-98. Mar.
15, 1893)
Contains Bibliography.
Kemp, J. F. J. S. N. (In Geol. Soc. America. Bull. v. 4, p. 393-406. 1893)
Bibliography, p. 399-406.
U. S. Geol. Surv. 14th Ann. Rept. 1893. pt. 1, p. 61-4.
Amer. J. Sc. ser. 3, v. 45, p. 79-80.
- 1893 Kemp, J. F. J. S. N. (In School of Mines Quart. v. 14, p. 93-111, 2 port.)
Bibliography, p. 100-11, 251-52.
- 1899 Benjamin, Marcus. J. S. N. (In Amer. Assoc. Adv. Sc. Proc. v. 48, p.
429-32. 1899)
J. S. N. (In Science. n. s. v. 10, p. 678-79. Nov. 10, 1899)
- 1906 Merrill, G. P. J. S. N. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash.
1906. p. 480-82, port.)
- 1909 White, C. A. J. S. N. (In Nat. Acad. Sc. Biogr. Mem. v. 6, p. 1-24. 1909)
Bibliography, p. 15-24; Rd. Apr. 17, 1902.

NEWCOMB, Wesley. 1808-1892

- 1892 Stearns, R. E. C. W. N. (In *Nautilus*. v. 5, no. 11, p. 121-24, port. Mar. 1892)

NICKLIN, Philip Houlbrooke. 1786-1842

- 1859 Simpson's *Lives of eminent Philadelphians*. 1859. p. 744-45.

NICOLLET, Joseph Nicolas. 1786-1843

- 1843 *Amer. J. Sc.* v. 45, p. 404. Oct. 1843.
 1844 Quetelet, A. J. N. N. Bruxelles, 1844. (In *Acad. Royale des Sciences, des lettres, et des beaux-arts de Belgique. Annales*. v. 10, p. 133-37)
 1856 Sibley, H. H. J. N. N. (In *Minn. Hist. Soc. Coll.* v. 1, p. 183-85. 1856)
 Repr. in *Coll.* v. 6, p. 242-45. 1891.
 1891 Winchell, N. H. J. N. N. (In *Amer. Geol.* v. 8, p. 343-52, port. 1891)
 Additional facts by H. V. Winchell, in v. 13, p. 126-28. 1894.
 1906 Merrill, G. P. J. N. N. (In *U. S. Nat. Mus. Ann. Rept. for 1904*. Wash. 1906. p. 316)

NILES, William Harmon. 1838-1910

- 1911 Barton, G. H. W. H. N. (In *Geol. Soc. America. Bull.* v. 22, p. 8-14. 1911)
 Bibliography with port., in v. 23, p. 34-5. 1912.

NORTH, Erasmus D. 1807-1858

- 1858 *Amer. J. Sc.* ser. 2, v. 26, p. 155. 1858.

NORTON, Edward. 1823-1894

- 1894 *Entomological News*. v. 5, p. 161-63, port. June, 1894.

NORWOOD, Joseph Granville. 1807-1895

- 1895 *Amer. J. Sc.* ser. 3, v. 50, p. 79-80. 1895.
 Broadhead, G. C. J. G. N. (In *Amer. Geol.* v. 16, p. 69-74, port. 1895)
 Bibliography for 1838-1868, p. 72-4.
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 855-56.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 220-21.

NUTTALL, Thomas. 1786-1859

- 1860 Durand, Elias. T. N. (In *Amer. Phil. Soc. Proc.* v. 7, p. 297-315. 1860)
 Gardener's *Mthly.* v. 2, p. 21-3, port. Jan. 1860.
 1862 *Amer. Acad. A. & Sc. Proc.* v. 5, p. 6-8. 1862.
 Rd. in 1860
 1886 *Minn. Acad. Nat. Sc. Bull.* v. 13, p. 30-1. 1886.
 1895 *Pop. Sc. Mthly.* v. 46, p. 689-96, port. Mar. 1895.
 1896 Youmans, W. J. T. N. (In his *Pioneers of science in America*. p. 205-14. 1896)
 1899 Harshberger, John. T. N. (In his *Botanists of Phila.* 1899. p. 151-59, port.)
 Contains Bibliography.
 1907 Osterhout, G. E. Nuttall and Pursh and some early Spring flowers of Colorado. Denver, Colo., & Tucson, Ariz., Apr. 1907. (In *Plant World*. v. 10, no. 4, p. 80-4)
 1909 *Pop. Sc. Mthly.* v. 74, p. 52-7, port. 1909. (Spaulding)

- 1914 Keyes, C. R. Early geological work of Nuttall. (In *Pop. Sc. Mthly.* v. 84, no. 2, p. 184-87. Feb. 1914)

OAKES, William. 1799-1848

- 1849 *Amer. J. Sc.* ser. 2, v. 7, p. 138-42. Jan. 1849.
1881 *Essex Inst. Bull.* v. 12, p. 90-1. 1881.
Memorial Hist. Boston. 1881. v. 4, p. 524.

OLIVER, Daniel. 1787-1842

- 1907 *Nat. Cycl. Amer. Biog.* v. 9, p. 92-3. 1907.

OLMSTED, Denison. 1791-1859

- 1859 *Amer. J. Sc.* ser. 2, v. 28, p. 109-18. July, 1859.
1860 *Amer. Assoc. Adv. Sc. Proc.* v. 13, p. 4-6. 1860.
1879 Kingsley, W. L. D. O. (In his *History of Yale College.* 1879. v. 1, p. 232-49, port.) (By Lyman, C. S.)
1895 *Pop. Sc. Mthly.* v. 46, p. 401-8, port. Jan. 1895.
1896 Youmans, W. J. D. O. (In his *Pioneers of science in America.* 1896. p. 250-59, port.)

OLNEY, Stephen Thayer. 1812-1878

- 1879 *Amer. Acad. A. & Sc. Proc.* v. 14, p. 367-68. 1879.
1892 *Sargent's Silva N. A.* v. 3, p. 47. 1892.

ORD, George. 1781-1866

- 1908 Rhoads, S. N. G. O. (In *Cassinia.* v. 12, p. 1-8, port. 1908)

ORTON, Edward. 1829-1899

- 1900 White, I. C. E. O. (In *Amer. Geol.* vol. 25, p. 197-210, port. 1900)
Bibliography, p. 204-10.
Stevenson, J. J. E. O. (In *Jour. Geol.* v. 8, p. 205-13. 1900)
1902 Hobbs, W. H. E. O. (In *Wisconsin Acad. Sc. & Letters. Trans.* v. 13, p. 610-13. 1902)

ORTON, James. 1830-1877

- 1877 *Amer. J. Sc.* ser. 3, v. 14, p. 512. 1877.
1878 *Amer. Nat.* v. 12, p. 65-6. Jan. 1878.

OSGOOD, George. 1784-1863

- 1881 *Memorial Hist. Boston.* 1881. v. 4, p. 520.

***OSTEN-SACKEN, Charles Robert von. 1828-1906**

- 1901 Osten-Sacken, C. R. von. An introduction to the record of my life work in entomology. Cambridge, Mass., 1901. 26 p.
Worked in U. S., chiefly at the Smithsonian Institution, 1856-77. Contains some account of his association with H. LOEW (q.v.)
1903 ———— Record of my life work, in entomology. Cambridge, Mass., 1903-4. 8 + 240 p. 3 port.
1906 Aldrich, J. M. C. R. O. (In *Entomological News.* v. 17, p. 269-72, port. Oct. 1906)

OWEN, David Dale. 1807-1860

- 1861 *Amer. J. Sc.* ser. 2, v. 31, p. 153-55. Jan. 1861.
Kentucky Geol. Surv. 4th Rept. 1861. p. 323-30.

- 1885 Marcou, J. B. Writings of D. D. O. . . . Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 247-51)
 1889 Winchell, N. H. D. D. O. (In Amer. Geol. v. 4, p. 65-72, port. 1889)
 1895 Pop. Sc. Mthly. v. 48, p. 259-64, port. Dec. 1895.
 1896 Youmans, W. J. D. D. O. (In his Pioneers of science in America. 1896. p. 500-8)
 1906 Merrill, G. P. D. D. O. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 350-53)

OWEN, Richard. 1810-1890

- 1890 Winchell, N. H. R. O. (In Amer. Geol. v. 6, p. 135-45, port. 1890)
 Amer. J. Sc. ser. 3, v. 39, p. 414. 1890.
 1894 Stanley-Brown, J. Geological writings of R. O. (In Geol. Soc. America. Bull. v. 5, p. 571-72. 1894)
 1897 Jordan, D. S. R. O. (In Pop. Sc. Mthly. v. 51, p. 259-65. June, 1867)

PACKARD, Alpheus Spring, Jr. 1839-1905

- 1887 Henshaw, Samuel. The entomological writings of A. S. P., Wash. 1887. 49 p. (In U. S. Dept. Agric. Div. Entom. Bull. no. 16)
 1888 Pop. Sc. Mthly. v. 33, p. 260-67, port. June, 1888.
 1905 Mead, A. D. A. S. P. (In Pop. Sc. Mthly. v. 67, p. 43-8, port. May, 1905)
 Science. n. s. v. 21, p. 401-6. Mar. 17, 1905. (By Barus, Carl)
 1920 Cockerell, T. D. A. A. S. P. (In Nat. Acad. Sc. Biogr. Mem. v. 9, p. 181-236, port. Feb. 1920)

Bibliography, p. 207-36.

PAINE, John Alsop, Jr. 1840-1912

- 1906 Nat. Cycl. Amer. Biog. v. 13, p. 456-57, port. 1906.

PAINTER, Jacob. 1814-1876

- 1899 Harshberger, John. J. P. (In his Botanists of Phila. 1899. p. 210)

PAINTER, Minshall. 1801-1873

- 1899 Harshberger, John. M. P. (In his Botanists of Phila. 1899. p. 184-85)

***PALISOT DE BEAUVOIS, Ambrose Francois Joseph. 1752-1820**

- 1824 Cuvier, Georges. Beauvois. (In Paris Acad. Sc. Mem. v. 4 (for 1819-20). pref. p. 318-46. 1824)

PALMER, Edward. 1821-1910

- 1911 Safford, W. E. E. P. (In Pop. Sc. Mthly. v. 78, p. 341-54, port. Apr. 1911)

PARK, Austin F. 1825-1893

- 1893 Auk. v. 10, p. 384-85. Oct. 1893.

PARKER, Charles F. 1820-1883

- 1884 Martindale, I. C. C. F. P. (In Acad. Nat. Sc. Phila. Proc. 1883. v. 35, p. 260-65. 1884)
 1899 Harshberger, John. C. F. P. (In his Botanists of Phila. 1899. p. 229-31)

PARRY, Charles Christopher. 1823-1890

- 1890 Coulter, J. M. C. C. P. (In Bot. Gaz. v. 15, no. 3, p. 66-8. Mar. 1890)
 1892 Phil. Soc. Wash. Bull. v. 12, p. 497-99. 1892-94.
 1893 Preston, C. H. C. C. P. (In Davenport Acad. Sc. Proc. v. 6, p. 35-45. Sept. 15, 1893)

Parry, C. C., (Mrs.). List of papers published by C. C. P. (In Davenport Acad. Sc. Proc. v. 6, p. 46-52. 1893)

1907 Parish, S. B. Parry and southern California botany. (In Plant World. v. 12, no. 7, p. 158-62. July, 1907)

1914 Kelly, H. A. C. C. P. (In his Some American medical botanists. Troy, N. Y., 1914. p. 180-86, port.)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 887-89.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 249-51.

PEABODY, Francis. 1801-1867

1873 Amer. Acad. A. & Sc. Proc. v. 8, p. 24-5. 1873.

Rd. in 1868.

1874 Essex Inst. Proc. v. 5, p. 51-2. 1874.

PEABODY, William Bourn Oliver. 1799-1847

1881 Memorial Hist. Boston. 1881. v. 4, p. 524.

PEALE, Charles Willson. 1741-1827

1830 Peale, Rembrandt. C. W. P. Phila. 1830. (In Doughty's Cabinet of Natural History. v. 1, pref. p. 1-7)

1834 Dunlap, William. C. W. P. N. Y. 1834. (In his History of rise & progress of arts in U. S. v. 1, p. 136-42)

Also in Repr., 1918, v. 1, p. 156-64.

1904 Sellers, H. W. Letters of Thomas Jefferson to C. W. P. (In Pa. Mag. Hist. & Biog. v. 28, p. 136-54, 295-319, 403-19. 1904)

1909 Colton, H. S. Peale's Museum. (In Pop. Sc. Mthly. v. 75, p. 221-38. Sept. 1909)

PEALE, Franklin. 1796-1870

1871 Amer. Phil. Soc. Proc. v. 11, p. 597-604. 1871.

PEALE, Titian Ramsay. 1799-1885

1905 Peale, A. C. T. R. P. (In Phil. Soc. Wash. Bull. v. 14, p. 317-26. 1901)

1913 Entomological News. v. 24, p. 1-3, port. Jan. 1913.

1915 Stone, Witmer. T. R. P. (In Cassinia. v. 19, p. 1-13, port. 1915)

1917 Amer. Mus. Jour. v. 17, p. 211-12, port. 1917.

PEASE, William Harper.

1872 Amer. J. Sc. ser. 3, v. 3, p. 320. 1872.

PECK, Charles Horton. 1833-1917

1914 Bessey, C. E. C. H. P. (In Science. n. s. v. 40, p. 48. 1914)

1919 Burnham, S. W. C. H. P. (In Mycologia. v. 11, p. 33-9. 1919)

PECK, William Dandridge. 1763-1822

1840 Quincy, Josiah. W. D. P. (In his History of Harvard College. 1840. v. 2, p. 329-30)

1843 Mass. Hist. Soc. Coll. ser. 2, v. 10, p. 161-70. 1843.

1881 Memorial Hist. Boston. 1881. v. 4, p. 518-19.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 900-1.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 260-61.

PERCIVAL, James Gates. 1795-1856

1856 Amer. J. Sc. ser. 2, v. 22, p. 150-51. July, 1856.

- 1866 Ward, J. H. *Life and letters of J. G. P.* Boston, 1866. 2v. illus. pl. port.
 1901 Legler, H. E. *J. G. P.—an anecdotal sketch and a bibliography.* Milwaukee, 1901. 61 p. 3 pl. 16°.
 1906 Merrill, G. P. *J. G. P.* (In *U. S. Nat. Mus. Ann. Rept.* 1904. Wash. 1906. p. 329-30)

PERKINS, Henry Coit. 1804-1873

- 1873 *Bost. Soc. Nat. Hist. Proc.* v. 15, p. 310-11. 1873.
 1874 *Essex Inst. Bull.* v. 5, p. 91. 1874.
Amer. Acad. A. & Sc. Proc. v. 9, p. 240-41. 1874.

PERRY, John Bulkley. 1825-1872

- 1874 *Amer. Acad. A. & Sc. Proc.* v. 9, p. 321-22. 1874.

PERRY, Matthew Calbraith. 1794-1858

- 1887 Fairchild, H. L. *M. C. P.* (In his *Hist. N. Y. Acad. Sc.* 1887. p. 91)

PETER, Robert. 1805-1894

- 1917 *Ky. Med. Jour.* v. 15, appx. p. 78-80. Nov. 1, 1917. (Some of the medical pioneers of Ky.)
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 908-9.
 Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 267-68.

PHELPS, Almira (Hart) Lincoln. 1793-1884

- 1909 *Nat. Cycl. Amer. Biog.* v. 11, p. 359. 1909.

PICKERING, Charles. 1805-1878

- 1878 *Amer. Acad. A. & Sc. Proc.* v. 13, p. 441-44. 1878.
 See also, p. 406-10, by Asa Gray, below, under 1889.
 1880 Bouve, T. T. *C. P.* (In *Bost. Soc. Nat. Hist. Anniv. Mem.* 1880. p. 189-92)
 1881 *Essex Inst. Bull.* v. 12, p. 91-2. 1881.
 1889 Gray, Asa. *C. P.* (In his *Scientific Papers.* v. 2, p. 406-10. 1889)
 1899 Harshberger, John. *C. P.* (In his *Botanists of Phila.* 1899. p. 190-93)
 1914 Kelly, H. A. *C. P.* (In his *Some American medical botanists.* Troy, N. Y., 1914. p. 151-53)

PIKE, Nicholas. 1817-1905

- 1884 Stiles, H. R. *N. P.* (In his *History of Brooklyn, N. Y.* v. 2, p. 1327-28. 1884)
 1904 *N. Y. Bot. Gard. Jour.* v. 5, p. 86-7. 1904.
 1905 *Science.* n. s. v. 21, p. 677. 1905.

PIKE, Zebulon Montgomery. 1779-1813

- 1893 Greeley, A. W. *Z. M. P.* (In his *Explorers & travellers.* N. Y. 1893. p. 163-93)
 1895 Coues, Elliott. *Memoir of Z. M. P.* (In *COUES, Elliott, ed. Expeditions of Z. M. P.* N. Y. 1895. v. 1, pref. p. 19-113)

PINTARD, John. 1759-1844

- 1905 Kelbie, B. H. *J. P.* (In his *Hist. N. Y. Hist. Soc.* 1905. p. 13-5, port.)

PITCHER, Zina. 1797-1872

- 1914 Kelly, H. A. *Z. P.* (In his *Some American Medical Botanists.* Troy, N. Y., 1914. p. 145-50, port.)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 917-18.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 274-76.

*POEY, Felipe Y Aloy. 1799-1891

1884 Jordan, D. S. F. P. (In Pop. Sc. Mthly. v. 25, p. 547-52, port. 1884)

POINSETT, Joel Roberts. 1779-1851

1888 Appleton's Cycl. Amer. Biog. v. 5, p. 48-9, port. 1888.

1896 Nat. Cycl. Amer. Biog. v. 6, p. 435-36, port. 1896.

POPE, Charles Alexander. 1818-1870

1866 St. Louis Med. & Surg. Jour. v. 3, p. 1-6. 1866.

1878 Chesney, J. P. C. A. P. (In Amer. Med. Assoc. Trans. v. 29, p. 741-47. 1878)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 921.

PORCHER, Francis Peyre. 1824-1895

1918 Gee, Wilson. F. P. P. (In Univ. S. C. Bull. no. 72, p. 46-8, port. Sept. 1918)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 922-23.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 277-78.

PORTER, Thomas Conrad. 1822-1901

1898 Addresses delivered at a celebration in honor of T. C. P. at Lafayette College, Oct. 20, 1897. Easton, Pa., 1898. 48 p.

1899 Harshberger, John. T. C. P. (In his Botanists of Phila. 1899. p. 236-43, port.)

Contains Bibliography, p. 241-43.

1901 Heller, A. A. T. C. P. (In Plant World. v. 4, no. 7, p. 130-31, port. July, 1901)

Britton, N. L. T. C. P. (In Torrey Bot. Club. Bull. v. 28, p. 369-73, port. July, 1901)

POURTALES, Louis Francois de. 1824-1880

1880 Amer. J. Sc. ser. 3, v. 20, p. 253-55. 1880.

1881 Pop. Sc. Mthly. v. 18, p. 549-52, port. Feb. 1881.

Amer. Acad. A. & Sc. Proc. v. 16, p. 435-43. 1881.

Bibliography, p. 441-43.

1883 Bost. Soc. Nat. Hist. Proc. v. 21, p. 47-8. 1883.

1905 Agassiz, Alexander, L. F. de P. (In Nat. Acad. Sc. Biogr. Mem. v. 5, p. 79-89. 1905)

Rd. Apr. 22, 1881.

Bibliography, p. 87-9.

POWELL, John Wesley. 1834-1902

1902 Amer. J. Sc. ser. 4, v. 14, p. 377-82. 1902.

Science. n. s. v. 16, p. 561-67, port. 1902.

1903 Walcott, C. D., and others. Proceedings . . . commemorative of his distinguished services . . . (In Wash. Acad. Sc. Proc. v. 5, p. 99-187. 1903)

Gilbert, G. K. J. W. P. (In Smith. Inst. Ann. Rept. 1902. Wash. 1903. p. 633-40, port.)

Merrill, G. P. J. W. P. (In Amer. Geol. v. 31, p. 327-32. 1903)

1905 Phil. Soc. Wash. Bull. v. 14, p. 300-8. 1905.

- 1915 Davis, W. M. J. W. P. (In Nat. Acad. Sc. Biogr. Mem. v. 8, p. 11-83, port. 1915)
- POWELL, William Byrd. 1799-1866
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 934.
- PRENTISS, Albert Nelson. 1836-1896
1896 Atkinson, G. F. A. N. P. (In Bot. Gaz. v. 21, p. 283-89, port. May, 1896)
- PRENTISS, D. Webster. 1843-1896
1900 Auk. v. 17, p. 91-2. Jan. 1900.
- PRESCOTT, William. 1789-1875
1877 Essex Inst. Bull. v. 8, p. 43-4. 1877.
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 937.
- PRIME, Temple. 1832-1903
1903 Nautilus. v. 16, p. 138-39. 1903.
Memorial Service in honor of T. P. at Huntington, L. I., Mar. 26, 1903. 43 p.
- PRINCE, William. 1766-1842
1915 Standard Cycl. Hort., ed. by L. H. Bailey. 1915. p. 1591.
- PRINCE, William Robert. 1795-1869
1915 Standard Cycl. Hort., ed. by L. H. Bailey. 1915. p. 1591, port.
- PROUT, Hiram A. -1862
1862 Amer. J. Sc. ser. 2, v. 33, p. 453. May, 1862.
St. Louis Acad. Sc. Trans. v. 2, p. 178-79. 1862.
1885 Marcou, J. B. Writings of H. A. P. Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 273-74)
- PUMPELLE, Raphael. 1837-1923
1918 Pumpelly, R. Reminiscences. N. Y. Holt, 1918. 2v. (844 p.) illus. pl. port.
1923 Amer. J. Sc. ser. 5, v. 6, p. 375-76. Oct. 1923.
- PURSH, Frederick. 1774-1820
1825 Amer. J. Sc. v. 9, p. 269-74. 1825. (By Hooker)
1826 Soc. Linn. Paris. Mem. v. 4, p. 710-12. 1826.
1827 Flora. v. 10, p. 491-96. 1827.
1896 Beauchamp, W. M. Long Island visit of F. P. in 1807. (In Syracuse Daily Journal for Nov. 17, 1896)
1897 Royal Soc. Canada. Proc. ser. 2, v. 3, sect. 4, p. 3-6. 1897.
1899 Harshberger, John. F. P. (In his Botanists of Phila. 1899. p. 113-17)
1907 Osterhout, G. E. Nuttall & Pursh and some early spring flowers. Denver, Colo., Apr. 1907. (In Plant World. v. 10, no. 4, p. 80-4)
- PUTNAM, Frederick Ward. 1839-1915
1886 Abbott, C. C. F. W. P. (In Pop. Sc. Mthly. v. 29, p. 693-97. Sept. 1886)
1909 Mead, F. H. Bibliography of F. W. P. N. Y., Stechert, 1909. (In Putnam anniversary volume. p. 601-27)
1915 Amer. Mus. Jour. v. 15, p. 315-17. 1915. (By Clark Wissler)
Science. n. s. v. 42, p. 638-39. 1915.
1916 Kroeber, A. L. F. W. P. (In Amer. Anthrop. n. s. v. 17, p. 712-18)

Dixon, R. B. F. W. P. (In Amer. Acad. A. & Sc. Proc. v. 51, p. 920-21. 1916)

Morse, E. S. F. W. P. (In Essex Inst. Hist. Coll. v. 52, p. 193-96. 1916)

RAFINESQUE-SCHMALTZ, Constantine Samuel. 1783-1840

1832 Audubon, J. J. Eccentric naturalist. (In his Ornithological biography. v. 1, p. 455-60. 1832)

1841 Gray, Asa. Notice of the botanical writings of C. S. R. (In Amer. J. Sc. v. 40, p. 221-41. Apr. 1841)

1842 Haldeman, S. S. Notice of the zoological writings of C. S. R. (In Amer. J. Sc. v. 42, p. 280-91. Apr. 1842)

1864 Binney, W. G., and Tryon, G. W., Jr. The complete writings of C. S. R. on recent and fossil conchology; ed. by . . . N. Y. Bailliere, 1864. 96 + 7 p. 3 pl.

1876 Copeland, H. E. A neglected naturalist. (In Amer. Nat. v. 10, p. 469-73. 1876)

Chase, T. L. C. S. R. (In Potter's Amer. Mthly. v. 6, p. 97-101, port. Feb. 1876)

1877 Jordan, D. S. Contributions to N. A. Ichthyology, based primarily on the collections of the U. S. National Museum, I: Review of Rafinesque's Memoirs on North American Fishes. Wash. 1877. 53 p. (In U. S. Nat. Mus. Bull. no. 9, art. 9)

Also in Smith. Inst. Misc. Coll. v. 13, art. 9.

1883 Bebb, M. S. C. S. R. (In Bot. Gaz. v. 8, no. 1, p. 149-52, 191-92. Jan. 1883)

1886 Minn. Acad. Nat. Sc. Bull. v. 13, p. 31-5. 1886.

1888 Dall, W. H. C. S. R. (In Biol. Soc. Wash. Proc. v. 4, p. 115-18. 1888)

1890 Greene, E. L. Some genera of Rafinesque. Berkeley, Cal., May, 1890. (In Pittonia. v. 2, p. 120-33)

1895 Call, R. E. The life and writings of C. S. R. Louisville, Ky., 1895. 12 + 227 p. port. 4°. (In Filson Club. Pub. no. 10)

Bibliography, p. 133-206.

Coulter, J. M., & Rose, J. N. Musineon of Rafinesque. (In Bot. Gaz. v. 20, p. 258-60. June, 1895)

1896 Jordan, D. S. C. S. R. (In his Science sketches. 1896. p. 153-69)

Younans, W. J. C. S. R. (In his Pioneers of science in America. 1896. p. 182-95)

1899 Harshberger, John. C. S. R. (In his Botanists of Phila. 1899. p. 144-48)

1900 Montgomery, T. L., ed. Correspondence of C. S. R. and Prof. Wm. Wagner. (In Science. n. s. v. 11, p. 448-50. 1900)

Fox, W. J. R.'s "Western Minerva; or, American Annals of Knowledge and Literature." (In Science. n. s. v. 12, p. 211-15. 1900)

1901 Fox, W. J. Two unknown works of C. S. R. (In Science. n. s. v. 14, p. 498-617. Sept. 27, 1901)

1902 Science. n. s. v. 15, p. 713-14. 1902. (R.'s letter to M. Cutler)

1905 Fitzpatrick, I. J. Additions to the bibliography of Rafinesque. Iowa City, Ia., Jan. 1905. (In Iowa Nat. v. 1, no. 1, p. 10-21, 38-9)

1906 Stejneger, Leonhard. C. S. R. on evolution (In Science. n. s. v. 23, p. 785-86. May 18, 1906)

1909 Richmond, C. W. A reprint of the ornithological writings of C. S. R. (In Auk. v. 26, p. 37-55, 248-62. 1909)

1911 Rhoads, S. N. C. S. R. as an ornithologist. (In Cassinia. v. 15, p. 1-12, port. 1911)

Fitzpatrick, I. J. C. S. R. . . . Des Moines, Ia., 1911. 241 p. port. 10 facsim. (In Hist. Dept. Iowa)

Biographical sketch, p. 11-62; Bibliography, p. 65-219; Bibliotheca Rafinesquam, p. 221-39; Portraits of R., p. 240-41. Additions in *Annals of Iowa*. v. 7, no. 3, p. 196-224. Oct. 1905.

- 1912 Rhoads, S. N. Additions to the known ornithological publications of C. S. E. (In *Auk*. v. 29, p. 191-98. Apr. 1912)
 1916 Walker, Bryant. The Rafinesque-Poulson Unios. (In *Nautilus*. v. 30, p. 43-7. Aug. 1916)
 1917 Jordan, D. S. Concerning R.'s *Precis des decouvertes somniologiques*. (In *Acad. Nat. Sc. Phila. Proc.* 1917. v. 69, p. 276-78)
 Pilsbry, H. A. R.'s genera of fresh water snails. (In *Nautilus*. v. 30, p. 109-14. Feb. 1917)
 1921 Pennell, F. W. Unrecorded genera of C. S. R.; I: *Autikon botanicon*. (In *Torrey Bot. Club. Bull.* v. 48, p. 89-96. Mar. 1921)

Other papers to follow.

RAND, Benjamin Howard. 1827-1883

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 955.

RATHVON, Simon Snyder. 1812-1891

1890 Goding, F. W. S. S. R. (In *Pa. State Hort. Soc. Rept. for 1890*. p. 8-10, port.)

In *Agric. of Pa. for 1890*.

RAUCH, John E. 1818-1861

1861 *Gardener's Mthly.* v. 3, p. 155. 1861.

RAUCH, John Henry. 1828-1894

1904 *Nat. Cycl. Amer. Biog.* v. 12, p. 452. 1904.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 957-58.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 305.

RAVENEL, Edmund. 1797-1870

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 959-60.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 305-6.

RAVENEL, Henry William. 1814-1887

1887 Dudley, W. R. H. W. R. Manhattan, Kansas, Sept. 1887. (In *Jour. Mycology*. v. 3, no. 9, p. 106-7)

Farlow, W. G. H. W. R. (In *Bot. Gaz.* v. 12, p. 194-97. Aug. 1887)

Charleston, S. C., *News-Courier*. July 20, 1887.

1893 Scribner, Frank Lamson. H. W. R. (In *Torrey Bot. Club. Bull.* v. 20, p. 324-25. Aug. 1893)

1918 Gee, Wilson. H. W. R. (In *Univ. S. C. Bull.* no. 72, p. 38-41, port. Sept. 1918)

1920 Bragg, L. M. H. W. R. (In *Charleston, S. C. Mus. Bull.* v. 16, p. 17-23. Feb. 1920)

RAVENEL, St. Julien. 1819-1892

1882 *Amer. Acad. A. & Sc. Proc.* v. 17, p. 437-38. 1882.

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 959.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 306-7.

REDFIELD, John Howard. 1815-1895

1895 *Amer. J. Sc.* ser. 3, v. 49, p. 485. 1895.

Canby, W. M. J. H. R. (In Torrey Bot. Club. Bull. v. 22, p. 162-71, port. Apr. 1895)

Bibliography, p. 169-71.

Meehan, Thomas. J. H. R. (In Bot. Gaz. v. 20, p. 175-76. Apr. 1895)

1899 Harshberger, John. J. H. R. (In his Botanists of Phila. 1899. p. 211-19, port.)

Bibliography, p. 217-19.

REDFIELD, William C. 1789-1857

1857 Amer. J. Sc. ser. 2, v. 23, p. 292-93. March, 1857.

Olmsted, Denison. W. C. R. (In Amer. J. Sc. ser. 2, v. 24, p. 355-73. Nov. 1857.

Bibliography, p. 370-73.

Bost. Soc. Nat. Hist. Proc. v. 6, p. 186-91. 1857.

1858 Amer. Assoc. Adv. Sc. Proc. 1858. v. 11, p. 9-34.

Rd. Aug. 14, 1857, by Denison Olmsted.

1887 Fairchild, H. L. W. C. R. (In his Hist. N. Y. Acad. Sc. 1887. p. 76-81, port.)

1896 Pop. Sc. Mthly. v. 50, p. 114-19, port. Nov. 1896.

1899 Benjamin, Marcus. W. C. R. (In Amer. Assoc. Adv. Sc. Proc. 1899. v. 48, p. 400-1, port.)

W. C. R. (In Science. n. s. v. 10, p. 627-28. Nov. 3, 1899)

REED, Stephen

1877 Amer. J. Sc. ser. 3, v. 14, p. 168. 1877.

RENWICK, James. 1792-1863

1863 Amer. Jr. Sc. ser. 2, v. 35, p. 306. Mar. 1863.

1865 Amer. Acad. A. & Sc. Proc. v. 6, p. 134-35. 1865.

Rd. in 1863.

RICH, Obadiah. 1783-1850

1918 Ricker, P. L. O. R. (In Wash. Acad. Sc. Proc. v. 8, p. 491, footnote. 1918)

RIDDEL, John Leonard. 1807-1865

1866 Amer. J. Sc. ser. 2, v. 41, p. 141-43. 1866.

1883 Bailey, L. H., Jr. J. L. R. (In Bot. Gaz. v. 8, no. 8, p. 269-71. Aug. 1883)

1914 Kelly, H. A. J. L. R. (In his Some American medical botanists. Troy, N. Y., 1914. p. 154-56, port.)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 981-82.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 322-23.

*RIEHL, Nicholas. 1808-1852

1909 Pop. Sc. Mthly. v. 74, p. 129, port. 1909. (Spaulding)

RILEY, Charles Valentine

1889 Henshaw, Samuel. Bibliography of the more important contributions to American economic entomology . . . parts 1-3. Wash. 1889. 454 p.

p. 51-95. Writings by Walsh & Riley; p. 97-371, by Riley.

1895 Packard, A. S., Jr. C. V. R. (In Science. n. s. v. 2, p. 745-51. Dec. 6, 1895)

Phil. Soc. Wash. Bull. v. 13, p. 412-16. 1895.

1896 Science. n. s. v. 3, p. 217-25. 1896. (By G. B. Goode)

ROBBINS, James Watson. 1801-1879

1879 Amer. J. Sc. ser. 3, v. 17, p. 180. 1879.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 984.

RODGERS, John. 1812-1882

1882 Amer. Acad. A. & Sc. Proc. v. 17, p. 438-41. 1882.

1909 Hall, Asaph. J. R. (In Nat. Acad. Sc. Biogr. Mem. v. 6, p. 81-92, port. 1909)

Rd. Apr. 18, 1906.

*ROEMER, Carl Ferdinand von. 1818-1891

1902 Simonds, F. W. Dr. R., the father of the geology of Texas. (In Amer. Geol. v. 29, p. 131-40, port.)

Contains Bibliography.

ROGERS, Henry Darwin. 1808-1866

1866 Amer. J. Sc. ser. 2, v. 42, p. 136-38. 1866.

1868 Amer. Acad. A. & Sc. Proc. v. 7, p. 309-12. 1868.

1885 Ruschenberger, W. S. W. . . . H. D. R. (In Amer. Phil. Soc. Proc. v. 23, p. 104-46. 1885)

Bibliography, H. D. R., p. 142-44.

1896 Pop. Sc. Mthly. v. 50, p. 258-64, port. Dec. 1896.

ROGERS, Robert Empie

1885 Ruschenberger, W. S. W. R. E. R. (In Amer. Phil. Soc. Proc. v. 23, p. 104-46. 1885)

1905 Smith, E. F. R. E. R. (In Nat. Acad. Sc. Biogr. Mem. v. 5, p. 291-309. 1905)

Bibliography, p. 309; Rd. Nov. 15, 1894.

ROGERS, William Barton. 1804-1882

1876 Pop. Sc. Mthly. v. 9, p. 606-11. 1876.

1883 Amer. Acad. A. & Sc. Proc. v. 18, p. 428-38. 1883.

1885 Ruschenberger, W. S. W. W. B. R. (In Amer. Phil. Soc. v. 23, p. 104-46. 1885)

Bibliography, p. 138-42.

1893 Ruschenberger, W. S. W. W. B. R. (In Amer. Phil. Soc. Proc. v. 31, p. 254-57. 1893)

1895 Walker, F. A. W. B. R. (In Nat. Acad. Sc. Biogr. Mem. v. 3, p. 1-13. 1895)

Rd. in April, 1887.

1896 Youmans, W. J. W. B. R. (In his *Pioneers of science in America*. 1896. p. 410-18)

1897 Science. n. s. v. 6, p. 1-9, port. 1897. (By Mendenhall, T. C.)

1899 Science. n. s. v. 10, p. 763-66. Nov. 24, 1899. (By Marcus Benjamin)

1899 Benjamin, Marcus. W. B. R. (In Amer. Assoc. Adv. Sc. Proc. 1899. v. 48, p. 454-59, port.)

1906 Merrill, G. P. W. B. R. (In U. S. Nat. Mus. Ann. Rept. 1904. Wash. 1906. p. 341-44, port.)

ROMANS, Bernard. -1783

1892 Sargent's Silva N. A. v. 4, p. 5. 1892.

ROMINGER, Carl Ludwig. 1820-1907

1908 Merrill, G. P. C. L. R. (In Smith. Inst. Misc. Coll. v. 52, p. 79-82, port. 1908)

See also U. S. Nat. Mus. Ann. Rept. for 1904. Wash. 1906. p. 539-41.

ROTHROCK, Joseph Trimble. 1839-1922

1899 Harshberger, John. J. T. R. (In his Botanists of Phila. 1899. p. 305-13, port.)

Contains Bibliography, p. 310-13.

1922 Jour. Forestry. v. 20, p. 567-68, 911-12. 1922.

Amer. Forestry. v. 28, p. 414. July, 1922.

RUFFIN, Edmund. 1794-1865

1891 Holmes, J. A. E. R. (In Elisha Mitchell Sc. Soc. Jour. v. 7, pt. 2, p. 115. 1891)

1907 Nat. Cycl. Amer. Biog. v. 5, p. 261, port. 1907.

RUSCHENBERGER, William Samuel Waithman. 1807-1895

1895 Nautilus. v. 9, p. 31-2. July, 1895.

1896 Nolan, E. J. W. S. W. R. (In Phila. Acad. Nat. Sc. Proc. 1895. v. 47, p. 452-62. 1896)

RUSSELL, John Lewis. 1808-1873

1874 Essex Inst. Bull. v. 5, p. 51, 103-4. 1874.

Amer. Acad. A. & Sc. Proc. v. 9, p. 321. 1874.

1881 Essex Inst. Bull. v. 12, p. 92. 1881.

SAFFORD, James Merrill. 1822-1907

1909 Geol. Soc. America. Bull. v. 19, p. 522-27. 1909. (By Stevenson, J. J.)
Bibliography, p. 524-27.

SAGER, Abram. 1810-1877

1904 Michigan Acad. Sc. Ann. Rept. 1904. v. 5, p. 196-97, port.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1013-14.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 345.

ST. JOHN, Samuel. 1813-1876

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1014.

SALISBURY, James Henry. 1823-1905

1900 Nat. Cycl. Amer. Biog. v. 8, p. 469-70, port. 1900.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1014-15.

SAMUELS, Edward Augustus. 1836-1908

1908 Auk. v. 25, p. 34. July, 1908.

***SARRAZIN, Michel S. 1659-1734**

1914 Kelly, H. A. M. S. S. (In his Some American medical botanists. Troy, N. Y., 1894. p. 31-2)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1019.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 346-47.

SARGENT, Winthrop. 1753-1820

1881 Memorial Hist. Boston. 1881. v. 4, p. 518.

SARTWELL, Henry P. 1792-1867

- 1868 Amer. J. Sc. ser. 2, v. 45, p. 121. Jan. 1868.
 1889 Gray, Asa. H. S. (In his Scientific Papers. v. 2, p. 343-44. 1889)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1019.

SAVAGE, Joseph. 1823-1891

- 1893 Kansas Acad. Sc. Trans. v. 13, p. 65-8. 1893.

SAY, Thomas. 1797-1834

- 1835 Amer. J. Sc. v. 27, p. 393-95. Jan. 1835.
 1858 Binney, W. G., ed. Complete writings of T. S. on the conchology of the United States. N. Y. Bailliere, 1858. 6 + 252 p. 75 pl.
 1859 Le Conte, J. L., ed. The complete writings of T. S. on the entomology of North America; ed. by J. L. Le Conte; with a memoir of the author by George Ord. N. Y. Bailliere, 1859. 2v. 55 pl.
 Another ed., N. Y. 1869 entitled: American entomology: a description of the insects of North America.
 Repr. Phila. A. E. Foote, 1891. 2v. 54 pl. (412 p. + 814 p.)
 Biographical sketch by Ord, v. 1, pref. p. 7-21.
 1882 Kingsley, J. S. T. S. (In Pop. Sc. Mthly. v. 21, p. 687-91. Sept. 1882)
 1888 Dall, W. H. T. S. (In Biol. Soc. Wash. Proc. v. 4, p. 98-102. 1888)
 1895 Webster, F. M. T. S. (In Entomological News. v. 6, p. 1-4, 33-4, 80-1, 101-3, port. 1895)
 1896 Harris, G. D. A reprint of the palaeontological writings of T. S. Ithaca, N. Y., Cornell Univ., Dec. 7, 1896. (In Bull. Amer. Palaeont. v. 1, no. 5, p. 271-354, 7 pl.)
 Youmans, W. J. T. S. (In his Pioneers of science in America. 1896. p. 215-22)
 1899 Harris, T. W. MSS. notes by the late T. W. H. on Say's insects and papers. (In Psyche. v. 8, p. 399-401, 411-14. Sept.-Oct. 1899)
 1901 Fox, W. J. Letters from T. S. to John F. Melsheimer: 1816-25. (In Entomological News. v. 12, p. 110-13, 138-41, 173-77, 203-5, 233-36, 281-83, 314-16; & v. 13, p. 9-12. 1901)
 1907 Sterki, V. A few notes on Say's early writings and species. (In Nautilus. v. 21, p. 31-4. July, 1907)

SCHIEL, James

- 1885 Marcou, J. B. Writings of J. S. . . . Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30. p. 253)

SCHNEIDER, Louis. 1836-1901

- 1901 Entomological News. v. 12, p. 256. Oct. 1901.

***SCHOEPF, Johann David. 1752-1800**

- 1894 Williams, G. H. J. D. S. and his contributions to North American geology. (In Geol. Soc. America. Bull. v. 5, p. 591-93. 1894)
 1901 Goode, G. B. J. D. S. (In U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, p. 396-97. 1901)
 Repr. from Biol. Soc. Wash. Proc. v. 3, p. 92. 1886.
 1910 Morrison, A. J. J. D. S. (In German-Amer. Soc. Annals. v. 12, (n. s. v. 8). p. 255-64. 1910)

SCHOOLCRAFT, Henry Rowe. 1793-1864

1890 Winchell, N. H. H. R. S. (In Amer. Geol. v. 5, p. 1-9, port. 1890)

Bibliography, p. 7-9.

Pop. Sc. Mthly. v. 37, p. 113-21, port. May, 1890.

1896 Youmans, W. J. H. R. S. (In his *Pioneers of science in America*. 1896. p. 300-10)

SCHOTT, Arthur. 1814-1875

1896 Sargent, C. S. A. S. (In his *Silva N. A.* v. 10, p. 18. 1896)

SCHWEINITZ, Lewis David de. 1780-1834

1835 Johnson, W. R. A memoir of L. D. de S., with a sketch of his scientific labors . . . read May 12, 1835. Phila. W. P. Gibbons, 1835. 39 p.

1884 Morgan, H. P. L. D. de S. (In Bot. Gaz. v. 9, no. 2, p. 19-23. Feb. 1884)

1885 Phillips, Charles. L. D. de S. (In Elisha Mitchell Sc. Soc. Jour. v. 3, p. 9-18, port. 1885)

1886 Kellerman, W. A. L. D. de S. Manhattan, Kansas. (In Jour. Mycology. v. 2, no. 3, p. 31-4. Mar. 1886)
Minn. Acad. Nat. Sc. Bull. v. 13, p. 29-30. 1886.

1894 Pop. Sc. Mthly. v. 44, p. 833-40, port. Apr. 1904.

1896 Youmans, W. J. L. D. de S. (In his *Pioneers of Science in America*. 1896. p. 167-75, port.)

1899 Harshberger, John. L. D. de S. (In his *Botanists of Phila.* 1899. p. 127-32, port.)

1902 Shear, C. L. L. D. de S. Berkeley, Cal., Mar. 1902. (In *Pittonia*. v. 5, no. 3, p. 45-7, port.)

1921 Shear, C. L., and Stevens, N. E. Correspondence of Torrey and Schweinitz. (In Torrey Bot. Club. Mem. v. 16, p. 119-300, 2 pl. July, 1921)

*SCLATER, Philip Lutley. 1829-1913

1914 Elliot, D. G. P. L. S. (In Auk. v. 31, p. 1-12, port. Jan. 1914)

SCUDDER, Samuel Hubbard. 1837-1911

1879 Dimmock, George. The writings of S. H. S., comp. and ed., by . . . Cambridge, Mass., 1879. 28 p. (In Dimmock's Special Bib. no. 3)

1911 Kingsley, J. L., and others. S. H. S. (In Psyche. v. 18, p. 175-92, port. Dec. 1911)

p. 179-80, S.'s work on the Lepidoptera, by Field.

p. 181-86, S.'s work on fossil insects, by Cockerell.

p. 187-92, Orthopterological work, by A. P. Morse.

Amer. J. Sc. ser. 4, v. 31, p. 582. 1911.

Amer. J. Sc. ser. 4, v. 34, p. 338-42. 1911.

Cockerell, T. D. A. S. H. S. (In Science. n. s. v. 34, p. 339-42. Sept. 15, 1911)

Bibliography, p. 339-40.

1912 Appalachia. v. 12, p. 276-79, port. 1912.

SEELY, Henry Martyn. 1828-1917

1918 Perkins, G. H. H. M. S. (In Geol. Soc. America. Bull. v. 29, p. 65-8. 1918)

Bibliography, p. 68-9.

SEELYE, Charles W. 1829-1907

- 1912 Beckwith, F. M. C. W. S. (In Rochester Acad. Sc. Proc. v. 5, p. 46. Feb. 1912)

SEYBERT, Adam. 1773-1825

- 1898 Nat. Cycl. Amer. Biog. v. 4, p. 237. 1898.

SEYBERT, Henry. -1883

- 1883 Amer. J. Sc. ser. 3, v. 25, p. 320. 1883.

SHALER, Nathaniel Southgate. 1841-1906

- 1906 Amer. J. Sc. ser. 4, v. 21, p. 480-81. 1906.
Science. n. s. v. 23, p. 869-72. 1906.
1907 Hobbs, W. H. N. S. S. (In Wisconsin Acad. Sc. & Letters. Trans. v. 15, pt. 2, p. 924-27, port. 1907)
1908 Wolff, J. E. N. S. S. (In Geol. Soc. Amer. Bull. v. 18, p. 592-609, port. 1908)

Bibliography, p. 599-609.

- 1909 Shaler, N. S. Autobiography; with a supplementary memoir by his wife. Bost. Houghton, 1909. 9 + 481 p. illus. pl. port.

SHAW, Henry. 1800-1889

- 1890 Dimmock, Thomas. H. S. (In Missouri Bot. Gard. Ann. Rept. 1890. v. 1, p. 7-25, port.)
1909 Pop. Sc. Mthly. v. 74, p. 247-50, port. 1909.

SHEAFER, Peter Wenrich. 1819-1891

- 1891 Lesley, J. P. P. W. S. (In Amer. Phil. Soc. Proc. v. 29, p. 39-42 1891)

SHECUT, John Linnaeus Edwards Whitridge. 1770-1836

- 1906 Willis, Eola. J. L. E. W. S. (In Charleston Mus. Bull. v. 2, no. 4, p. 27-32. Apr. 1906)
1918 Gee, Wilson. J. L. E. W. S. (In Univ. S. C. Bull. no. 72, p. 29-32. Sept. 1918)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1042-43.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 365-66.

SHEPHARD, Charles Upham. 1804-1886

- 1886 Amer. Acad. A. & Sc. Proc. 1886. v. 21, p. 535-37.
Amer. J. Sc. ser. 3, v. 31, p. 482-83. 1886.
1895 Pop. Sc. Mthly. v. 47, p. 548-53, port. Aug. 1895.
1896 Youmans, W. J. C. U. S. (In his Pioneers of science in America. 1896. p. 419-27)

SHORT, Charles Wilkins. 1794-1863

- 1863 Amer. J. Sc. ser. 2, v. 36, p. 130-32. July, 1863.
1865 Amer. Acad. A. & Sc. Proc. v. 6, p. 135-36. 1865.
Rd. in 1863.
1869 Amer. Phil. Soc. Proc. v. 10, p. 171-86. 1869.
Rd. in 1865, by Gross.
1889 Gray, Asa. C. W. S. (In his Sc. Papers. 1889. v. 2, p. 312-14)
1914 Kelly, H. A. C. W. S. (In his Some American medical botanists. Troy, N. Y., 1914. p. 129-35, port.)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1048-49.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2. p. 370-71. port.

SHUMARD, Benjamin Franklin. 1820-1869

- 1869 Amer. J. Sc. ser. 2, v. 48, p. 294-96. 1869.
Yandell, L. P. B. F. S. (In Western Jour. Med. v. 4, p. 738-49. 1869)
1885 Marcou, J. B. Writings of B. F. S. Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 255-58, 274)
See also p. 247-51 (with Owen, D. D.)
1889 Winchell, N. H. B. F. S. (In Amer. Geol. v. 4, p. 1-6, port. 1889)
Bibliography, p. 4-6.
1898 Pop. Sc. Mthly. v. 52, p. 633-34. Mar. 1898. (Starr)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1050-51.
Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 372-73.

SHUMARD, George Getz. 1825-1867

(Brother of preceding)

SHURTLEFF, Nathaniel Bradstreet. 1810-1874

- 1876 Essex Inst. Bull. v. 7, p. 93-4. 1876.

SILLIMAN, Benjamin, Sr. 1779-1864

- 1865 Canadian Nat. & Geol. n. s. v. 1, p. 461-69. 1865.
Amer. J. Sc. ser. 2, v. 39, p. 1-9. Jan. 1865.
Amer. Acad. A. & Sc. Proc. v. 6, p. 509-14. 1865-66.
1866 Fisher, George. Life of B. S., late professor of chemistry, etc., in Yale College, chiefly from his MSS. reminiscences, diaries, and correspondence. N. Y. Scribner, 1866. 2v.
1867 Caswell, Alexis. B. S. (In Nat. Acad. Sc. Annual for 1866. p. 111-25. 1867)
Rd. Jan. 25, 1866. See also next entry.
1877 Caswell, Alexis. B. S. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 99-112. 1877)
1879 Wright, A. W. B. S. (In Kingsley, W. L., ed. History of Yale College. 1879. v. 1, p. 210-13, port.)
1883 Pop. Sc. Mthly. v. 23, p. 259-66. June, 1883.
Amer. Assoc. Adv. Sc. Proc. 1883. v. 31, p. 10-2.
1895 Yale Sc. Mthly. v. 1, p. 281-85. 1895.
1896 Youmans, W. J. B. S. (In his Pioneers of science in America. 1896. p. 140-51, port.)
1910 Gilman, D. C. B. S. (In Jordan, D. S. Leading American men of science. 1910. p. 89-117)

SILLIMAN, Benjamin, Jr. 1816-1885

- 1880 Pop. Sc. Mthly. v. 16, p. 550-53, port. Feb. 1880.
1885 Amer. J. Sc. ser. 3, v. 29, p. 85-92. 1885.
Amer. Acad. A. & Sc. Proc. 1885. v. 20, p. 523-27.
Amer. Inst. Mining Eng. Trans. v. 13, p. 782-85. 1885. (By Hunt, T. S.)

SLACK, John Hamilton. 1834-1874

- 1875 Nolan, E. J. J. H. S. (In Acad. Nat. Sc. Phila. Proc. for 1874. 1875. v. 26, p. 140-42)

SMITH, Aubrey H. 1815-1891

- 1899 Harshberger, John. A. H. S. (In his Botanists of Phila. 1899. p. 210-11)

SMITH, Daniel B. 1792-1883

1899 Harshberger, John. D. B. S. (In his *Botanists of Phila.* 1899. p. 173-74)

SMITH, George D. 1834-1880

1880 Bost. Soc. Nat. Hist. Proc. v. 21, p. 51-3. Oct. 1880.
Amer. Nat. v. 14, p. 756. Oct. 1880.

SMITH, George. 1804-1882

1899 Harshberger, John. G. S. (In his *Botanists of Phila.* 1899. p. 188-89)
1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1067-68.

SMITH, Hamilton Lanphere. 1818-1903

1904 Nat. Cycl. Amer. Biog. v. 12, p. 466. 1904.

SMITH, Jerome Van Crowninshield. 1800-1879

1904 Gill, T. N. J. V. C. S. (In *Science*. n. s. v. 20, p. 327-28. Sept. 9, 1904)

SMITH, John Jay. 1798-1881

1899 Harshberger, John. J. J. S. (In his *Botanists of Phila.* 1899. p. 183)

SMITH, John Lawrence. 1818-1883

1874 Pop. Sc. Mthly. v. 6, p. 233-35. 1874.
1883 Amer. J. Sc. ser. 3, v. 26, p. 414-15. 1883.
1884 Amer. Acad. A. & Sc. Proc. v. 19, p. 535-39. 1884.
Marvin, J. B., ed. *Original researches in mineralogy and chemistry by J. L. S. Louisville, J. P. Morton, 1884.* 40 + 630 p.
Biography, pref. p. 9-13.
1886 Silliman, Benjamin, Jr. J. L. S. (In *Nat. Acad. Sc. Biogr. Mem.* v. 2, p. 217-48. 1886)
Bibliography, p. 239-48; Rd. Apr. 17, 1884.
1899 Benjamin, Marcus. J. L. S. (In *Amer. Assoc. Adv. Sc. Proc.* 1899. v. 48, p. 443-47, port.)
J. L. S. (In *Science*. n. s. v. 10, p. 711-13. Nov. 17, 1899)

*SMITHSON, James. 1754-1829

1897 Langley, S. P. J. S. (In Goode, G. B., ed. *The Smithsonian Institution: 1846-1896.* Wash. 1897. p. 1-24, port.)

SMOCK, John Conover. 1842-

1909 Nat. Cycl. Amer. Biog. v. 11, p. 560. 1909.

SPENCER, Charles Achilles. 1813-1881

1906 Nat. Cycl. Amer. Biog. v. 13, p. 255-56. 1906.

SQUIER, Ephraim George. 1821-1888

1888 Amer. Nat. v. 22, p. 568, port. June, 1888.

STAUFFER, Jacob. 1808-1880

1880 Amer. Nat. v. 14, p. 466. June, 1880.

STEARNS, Robert Edwards Carter. 1827-1909

1909 *Science*. n. s. v. 30, p. 279-80. 1909. (By Dall)

STERLING, Elisha. 1827-1890

- 1918 Avery, E. R. E. S. (In his Cleveland & its environs. 1918. v. 1, p. 556)

STEVENS, Isaac Ingalls. 1818-1862

- 1916 U. S. Eng. Dept. Prof. Mem. v. 8, p. 649-52, port. 1916.

STEVENSON, James. 1840-1888

- 1889 U. S. Geol. Surv. 9th Ann. Rept. 1887-88. Wash. 1889. p. 42-4.

STIMPSON, William. 1832-1872

- 1872 Amer. Nat. v. 6, p. 445-46, 505. 1872.
 Stearns, R. E. C. W. S. (In Cal. Acad. Nat. Sc. Proc. v. 4, p. 230-32. June 17, 1872)
 1888 Dall, W. H. W. S. (In Biol. Soc. Wash. Proc. v. 4, p. 129-33, port. 1888)
 1914 Hedley, C. The Australian Journal of Dr. W. S., zoologist. Sydney, N. S. W., 1914. (In Royal Soc. New South Wales. Jour. v. 48, p. 140-51. 1914)
 1918 Mayer, A. G. W. S. (In Nat. Acad. Sc. Biogr. Mem. v. 8, p. 419-33, port. Mar. 1918)
 Bibliography, p. 429-33.

STORER, David Humphreys. 1804-1891

- 1880 Bouve, T. T. D. H. S. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 77-80 port.)
 1892 Amer. Acad. A. & Sc. Proc. v. 27, p. 388-91. 1892.
 White, J. C. D. H. S. (In Bost. Soc. Nat. Hist. Proc. v. 25, p. 347-54. 1892)
 Garman, Samuel. Dr. D. H. Storer's work on the fishes. (In Bost. Soc. Nat. Hist. Proc. v. 25, p. 354-57. 1892)

STORER, Francis Humphreys. 1832-1914

- 1915 Science. n. s. v. 41, p. 85-6. 1915.
 Fetzer, L. W. F. H. S. (In Biochemical Bull. v. 4, p. 1-17. 1915)
 Bibliography, p. 9-17.
 1919 Eliot, C. W. F. H. S. (In Amer. Acad. A. & Sc. Proc. v. 54, p. 415-18. 1919)

STORER, Horatio Robinson. 1830-1923

- 1909 Nat. Cycl. Amer. Biog. v. 11, p. 337, port. 1909.

STRECKER, Ferdinand Heinrich Herman. 1836-1901

- 1902 Entomological News. v. 13, p. 1-4, port. Jan. 1902.
 1909 Nat. Cycl. Amer. Biog. v. 10, p. 317. 1909.

SUCKLEY, George. 1830-1869

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1116.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 460.

SULLIVANT, William Starling. 1803-1873

- 1873 Amer. Acad. A. & Sc. Proc. v. 9, p. 271-76.
 Gray, Asa. W. S. S. (In Amer. J. Sc. ser. 3, v. 6, p. 1-6. July, 1873)
 1874 ——— W. S. S. Cambridge, Mass., 1874. (In Sullivant, W. S. Icones Muscorum. Supplement. p. 1-8)
 1877 Gray, Asa. W. S. S. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 277-85, port. 1877)

- 1889 Gray, Asa. W. S. S. (In his Scientific Papers. v. 2, p. 370-76. 1889)
1896 Pop. Sc. Mthly. v. 48, p. 690-96, port. Mar. 1896.
Youmans, W. J. W. S. S. (In his Pioneers of Science in America. 1896.
p. 394-401, port.)

SWALLOW, George Clinton. 1817-1899

- 1898 Pop. Sc. Mthly. v. 52, p. 634-35. Mar. 1898. (Starr)
1899 Broadhead, G. C. G. C. S. (In Amer. Geol. v. 24, p. 1-6. 1899)
Bibliography, p. 4-6.
1906 Merrill, G. P. G. C. S. (In U. S. Nat. Mus. Ann. Rept. for 1904. Wash.
1906. p. 527-28, port.)

SWIFT, Robert. 1795-1872

- 1872 Amer. J. Sc. ser. 3, v. 4, p. 160. 1872.

TATNALL, Edward. 1818-1898

- 1899 Harshberger, John. E. T. (In his Botanists of Phila. 1899. p. 225-26)

TAYLOR, Charlotte de Bernier. 1806-1861

- 1899 Nat. Cycl. Amer. Biog. v. 2, p. 164. 1899.

TAYLOR, Richard Cowling. 1789-1851

- 1852 Amer. J. Sc. ser. 2, v. 13, p. 144-47. Jan. 1852.
1853 Amer. Phil. Soc. Proc. v. 5, p. 226-28. 1853.
Rd. in 1852.

TENNENT, John.

- 1901 Goode, G. B. J. T. (In U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, p. 387-
88. 1901)
Repr. from Biol. Soc. Wash. Proc. v. 3, p. 79. 1886.

TENNEY, Sanborn. 1827-1877

- 1877 Amer. J. Sc. ser. 3, v. 14, p. 168. 1877.
Amer. Nat. v. 11, p. 508. 1877.

TESCHEMACHER, James Englebert. 1790-1853

- 1853 Bost. Soc. Nat. Hist. Proc. v. 4, p. 393-94. 1853.
1880 Bouve, T. T. J. E. T. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p.
59-60)
1881 Memorial Hist. Boston. 1881. v. 4, p. 521.

THOMAS, Cyrus. 1825-1910

- 1906 Nat. Cycl. Amer. Biog. v. 13, p. 528-29. 1906.
1910 Entomological News. v. 21, p. 387-88. 1910.

THOMAS, William Silas. 1826-

- 1909 Nat. Cycl. Amer. Biog. v. 10, p. 129. 1909.

THOMPSON, Zadock. 1796-1856

- 1856 Amer. J. Sc. ser. 2, v. 22, p. 44-9. July, 1856.
Bost. Soc. Nat. Hist. Proc. v. 5, p. 312-13. Mar. 1856.
1894 Pop. Sc. Mthly. v. 46, p. 262-67, port. Dec. 1894.
1896 Youmans, W. J. Z. T. (In his Pioneers of science in America. 1896.
p. 319-26, port.)

1902 Perkins, G. H. Z. T. (In Amer. Geol. v. 29, p. 65-71. 1902)

Bibliography, p. 70-1.

_____ Z. T. (In Vermont. State Geol. 3rd Rept. 1901-2. 1902.
p. 7-13, port.)

THORBURN, Grant. 1773-1863

1921 Torrey Bot. Club. Mem. v. 16, p. 300. 1921.

THURBER, George. 1821-1890

1890 Rusby, H. H. G. T. (In Torrey Bot. Club. Bull. v. 17, no. 8, p. 204-10. Aug. 1890)

1915 Standard Cycl. Hort., ed. by L. H. Bailey. 1915. v. 3, p. 1600-1.

TORREY, John. 1796-1873

1873 Pop. Sc. Mthly. v. 3, p. 632-38. 1873.

Amer. Acad. A. & Sc. Proc. v. 9, p. 262-71. 1873. (By Asa Gray)

Amer. J. Sc. ser. 3, v. 5, p. 411-21. 1873.

Bost. Soc. Nat. Hist. Proc. v. 15, p. 312-15. 1873. (By T. S. Hunt)

1874 Gray, Asa. J. T. (In Smith. Inst. Ann. Rept. 1873. 1874. p. 211-18)

1875 Dall, W. H. J. T. (In Cal. Acad. Sc. Proc. v. 5, p. 64-5. 1875)

1876 Davenport Acad. Sc. Proc. v. 1, p. 44-7. 1876.

1877 Gray, Asa. J. T. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 265-76. 1877)

Rd. April 15, 1873.

1883 Torrey, John. A letter from J. T. to Amos Eaton. (In Bot. Gaz. v. 8, no. 9, p. 289-91. 1883)

Thurber, George. J. T. (In Bot. Gaz. v. 8, no. 2, p. 165-70. Feb. 1883)

1887 Fairchild, H. L. J. T. (In his Hist. N. Y. Acad. Sc. 1887. p. 68-70, port.)

1889 Gray, Asa. J. T. (In his Scientific Papers. v. 2, p. 359-69. 1889)

1896 Youmans, W. J. J. T. (In his Pioneers of science in America. 1896. p. 327-35)

1899 Benjamin, Marcus. J. T. (In Amer. Assoc. Adv. Sc. Proc. 1899. v. 48, p. 413-15, port.)

_____ J. T. (In Science. n. s. v. 10, p. 635-37. Nov. 3, 1899)

1900 Britton, N. L., and others. Memorial of exercises at Torrey Day, June 27, 1900. (In Torrey Bot. Club. Bull. v. 27, p. 540-51. Oct. 1900)

Notes by James Hyatt, p. 559-61; by T. C. Porter, p. 561-64; by C. H. Peck, p. 564-65.

1914 Kelly, H. A. J. T. (In his Some American medical botanists. Troy, N. Y., 1914. p. 136-44)

1921 Shear, C. L., and Stevens, N. E. The correspondence of Schweinitz and Torrey. (In Torrey Bot. Club. Mem. v. 16, p. 119-300, 2 pl. July, 1921)

TOTTEN, Joseph Gilbert. 1788-1864

1865 Amer. Acad. A. & Sc. Proc. v. 6, p. 303-5. 1865.

1866 Nat. Acad. Sc. Annual for 1865. 1866. p. 51-127. (By Barnard, J. G.)

Repr. in Smith. Inst. Ann. Rept. for 1865. v. 20, p. 137-72.

1877 Barnard, J. G. J. T. (In Nat. Acad. Sc. Biogr. Mem. v. 1, p. 35-97. 1877)

Natural history labors, p. 88-91.

Rd. Jan. 6, 1866.

TOWNSEND, David. 1787-1858

1858 Darlington, William. Memorial of D. T. . . . West Chester, Pa. 1858. 8 p. port.

1899 Harshberger, John. D. T. (In his Botanists of Phila. 1899. p. 163-64)

TOWNSEND, John Kirk. 1809-1851

- 1903 Stone, Witmer. J. K. T. (In *Cassinia*. v. 7, p. 1-5, port. 1903)
 1909 Deane, Ruthven. Some original MSS. relating to the history of T.'s "Bunting." (In *Auk*. v. 26, p. 269-72. July, 1909)

TRASK, John Boardman. 1824-1879

- 1907 Vogdes, A. W. A bibliographical sketch of J. B. T., first state geologist of California. (In *San Diego Soc. Nat. Hist. Trans.* v. 1, p. 27-30. 1907)
 1908 *Science*. n. s. v. 28, p. 240-43. Aug. 21, 1908. (By Stearns, R. E. C.)

TREGO, Charles B. 1794-1874

- 1875 Roberts, S. W. C. B. T. (In *Amer. Phil. Soc. Proc.* v. 14, p. 356-58. 1875)

TRIMBLE, Isaac Pim. 1804-1890

- 1918 *Entomological News*. v. 29, p. 29-32. Jan. 1918.
 Bibliography, p. 32.

TROOST, Gerard. 1776-1850

- 1850 *Amer. J. Sc.* ser. 2, v. 10, p. 298. Sept. 1850.
 1894 *Pop. Sc. Mthly.* v. 45, p. 258-64, port. June, 1894.
 1896 Youmans, W. J. (In his *Pioneers of science in America*. 1896. p. 119-27, port.)
 1905 Glenn, L. C. G. T. (In *Amer. Geol.* v. 35, p. 72-94, port. 1905)
 Bibliography, p. 90-4.
 1906 *Univ. Nashville. Bull. of Information.* v. 5, no. 6, 29 p. port. Jan. 1907.
 Addresses Dec. 12, 1906, at the unveiling of portrait of G. T. in the chapel of the Peabody College for Teachers.

TROWBRIDGE, William Petit. 1825-1892

- 1895 Comstock, C. B. W. P. T. (In *Nat. Acad. Sc. Biogr. Mem.* v. 3, p. 363-67. 1895)
 Rd. in Nov. 1893.

TRYON, George Washington, Jr. 1838-1888

- 1888 *Amer. Nat.* v. 22, p. 279-80. Mar. 1888.
 Ruschenberger, W. S. W. G. W. T. (In *Acad. Nat. Sc. Phila. Proc.* 1888. v. 39, p. 399-418)
 Bibliography, p. 413-18.

TUCKERMAN, Edward, Jr. 1817-1886

- 1886 Gray, Asa. E. T. (In *Amer. J. Sc.* ser. 3, v. 32, p. 1-7. 1886)
Amer. Nat. v. 20, p. 578-79. June, 1886.
Amer. Acad. A. & Sc. Proc. 1886. v. 21, p. 539-47.
 Bibliography, p. 545-47.
Bot. Gaz. v. 11, no. 4, p. 73-8. Apr. 1886.
 Bibliography by Henry Willey, p. 74-8.
 From *Amherst Record*, Mar. 17, 1886.
 1889 Gray, Asa. E. T. (In Gray, Asa. *Sc. Papers*. 1889. v. 2, p. 491-98)
 1895 Farlow, W. G. E. T. (In *Nat. Acad. Sc. Biogr. Mem.* v. 3, p. 15-28. 1895)
 Bibliography, p. 25-8; Rd. Apr. 1887.
 1904 *Iowa Acad. Sc. Proc.* v. 11, p. 25-8, port. 1904.

TULLY, William. 1785-1859

- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 1166-67.

TUOMEY, Michael. 1805-1857

- 1857 *Amer. J. Sc.* ser. 2, v. 23, p. 448. May, 1857.
Rogers, W. B. M. T. (In *Bost. Soc. Nat. Hist. Proc.* v. 6, p. 185-86. 1857)
1891 Elisha Mitchell *Sc. Soc. Jour.* v. 7, pt. 2, p. 115-16. 1891. (By J. A. Holmes)
1897 Smith, E. A. M. T. (In *Amer. Geol.* v. 20, p. 205-12, port.)
Bibliography, annotated, by A. W. Vogdes, p. 210-12.
1906 *Nat. Cycl. Amer. Biog.* v. 13, p. 95. 1906.

TYSON, Philip Thomas. 1799-1877

- 1906 Merrill, G. P. P. T. T. (In *U. S. Nat. Mus. Ann. Rept.* 1904. Wash. 1906. p. 428)
Nat. Cycl. Amer. Biog. v. 13, p. 543. 1906.

UHLER, Philip Reese. 1835-1913

- 1900 *Nat. Cycl. Amer. Biog.* v. 8, p. 251. 1900.
1903 Henshaw, Samuel. Hemiptera described by Uhler. (In *Psyche.* v. 10, p. 31-42, 85-92, 122-24, 224-38. 1903)
1914 *Entomological Soc. Wash. Proc.* v. 16, p. 1-7, 1914.
Bibliography, p. 4-7.

VANDERKEMP, F. Adrian

- 1901 Goode, G. B. F. A. V. (In *U. S. Nat. Mus. Ann. Rept. for 1897.* pt. 2, p. 425. 1901)

VAN RENSSELAER, Jeremiah. 1793-1871

- 1897 *Nat. Cycl. Amer. Biog.* v. 7, p. 525. 1897.
1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 1177.
Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 469.

VAN REENSELAER, Stephen. 1764-1839

- 1839 *Amer. J. Sc.* ser. 1, v. 36, p. 156-64. 1839.

VAN VLECK, Jacob. 1751-1831

See next entry.

VAN VLECK, William Henry. 1790-1853

- 1921 Torrey Bot. Club. *Mem.* v. 16, p. 300. 1921.

VANUXEM, Lardner. 1792-1848

- 1848 *Amer. J. Sc.* ser. 2, v. 5, p. 445-46. May, 1848.
1874 La Borde's *Hist. S. C. College.* rev. ed., 1874. p. 138-43.
1891 Elisha Mitchell *Sc. Soc. Jour.* v. 7, pt. 2, p. 114-15. 1891.
1895 *Pop. Sc. Mthly.* v. 46, p. 833-40, port. Apr. 1895.
1896 Youmans, W. J. L. V. (In his *Pioneers of science in America.* 1896. p. 270-78, port.)

VASEY, George. 1822-1893

- 1893 *Amer. Acad. A. & Sc. Proc.* v. 28, p. 401-3. 1893.

Canby, W. M., and Rose, J. N. G. V. (In Bot. Gaz. v. 18, p. 170-83, port. May, 1893)

Bibliography, p. 176-83, by Miss J. A. Clarke.

1895 U. S. Nat. Mus. Ann. Rept. 1893. Wash. 1895. p. 85-6.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1177-78.

VAUX, William S. 1811-1882

1883 Acad. Nat. Sc. Phila. Proc. 1882. v. 34, p. 111-12. 1883.

VERNON, William.

1806 Barton, B. S. W. V. (In Phila. Med. & Phys. Jour. v. 2, pt. 2, p. 139-42. Sept. 1806)

VERRILL, Addison Emery. 1839-

1907 Smith, G. D. A. E. V. (In Yale Sc. Mthly. v. 13, p. 187-90, port. 1907)

1915 Science. n. s. v. 41, p. 747-48. 1915.

WACHSMUTH, Charles. 1829-1896

1896 Keyes, C. R. C. W. (In Amer. Geol. v. 17, p. 131-36, port. Mar. 1896)

1897 Calvin, Samuel. C. W. (In Geol. Soc. America. Bull. v. 8, p. 374-76. 1897)

Bibliography, p. 375-76.

WAGNER, William. 1796-1885

1898 Dall, W. H. Notes on the palaeontological publications of Prof. W. W. (In Wagner Free Inst. Sc. Trans. v. 5, p. 7-11, pl. 1898)

1917 Wagner Free Inst. Trans. v. 8, pref. 1 p. port. 1917.

WAILES, Benjamin Leonard Covington. 1797-1862

MSS. letter concerning life of B. L. C. W., by his son, seen in personal collection of Dr. J. H. Barnhart of the N. Y. Bot. Gard.

WALKER, William Johnson. 1789-1865

1880 Bouve, T. T. W. J. W. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 103-5, port.)

WALMSLEY, William Henry. 1830-1905

1912 Amer. Micros. Soc. Trans. v. 31, p. 219-20, port. 1912.

WALSH, Benjamin Dann. 1808-1869

1869 Riley, C. V. B. D. W. (In Amer. Entomologist. St. Louis, Dec. 1869-Jan. 1870. v. 2, no. 3, p. 65-8)

1889 Henshaw, Samuel. Bibliography of the more important contributions to American economic entomology . . . Wash. 1889. 454 p. (3 parts)
p. 1-49, Writings by Walsh; p. 51-95, by Walsh & Riley.

1894 Entom. News. v. 5, p. 269-70, port. Nov. 1894.

WALTER, Thomas. 1740-1788

1909 Torreya. v. 9, p. 246. Dec. 1909.

Repr. in N. Y. Bot. Gard. Jour. v. 10, p. 180. 1909. (By J. H. Barnhart)

1910 Coker, W. C. A visit to the grave of T. W. (In Elisha Mitchell Sc. Soc. Jour. v. 26, p. 31-42, illus. Apr. 1910)

Also in Charleston, S. C., News & Courier, for March 17, 1910.

1918 Gee, Wilson. T. W. (In Univ. S. C. Bull. no. 72, p. 20-3. Sept. 1918)

WALTON, Joseph. 1823-

- 1899 Harshberger, John. J. W. (In his *Botanists of Phila.* 1899. p. 243-45)

WARD, Henry Augustus. 1834-1906

- 1906 Farrington, O. C. H. A. W. (In *Science*. n. s. v. 24, p. 153-54. Aug. 3, 1906)
 1919 Fairchild, H. L. H. A. W. (In *Rochester Acad. Sc. Proc.* v. 5, p. 241-51. port. May, 1919)

WARD, James Warner. 1816-1897

- 1909 *Nat. Cycl. Amer. Biog.* v. 10, p. 247-48. 1909.

WARDER, John Aston. 1812-1883

- 1883 *Cincinnati Soc. Nat. Hist. Jour.* v. 6, p. 211-12. 1883.
 1898 *Nat. Cycl. Amer. Biog.* v. 4, p. 536. 1898.

WARE, John. 1795-1864

- 1864 *Amer. Acad. A. & Sc. Proc.* v. 6, p. 298-99. 1864.
 1880 *Bost. Soc. Nat. Hist. Anniv. Mem.* 1880. p. 95-6.

WARREN, Gouverneur Kemble. 1830-1882

- 1884 Abbot, H. L. G. K. W. (In *Science*. v. 3, p. 276-79, port. Mar. 7, 1884)
 1886 ——— G. K. W. (In *Nat. Acad. Sc. Biogr. Mem.* v. 2, p. 173-88. 1886)
 Rd. Apr. 17, 1884.

WARREN, John.

- 1888 Dall, W. H. J. W. (In *Biol. Soc. Wash. Proc.* v. 4, p. 105. 1888)

WARREN, John Collins. 1778-1856

- 1856 *Amer. J. Sc.* ser. 2, v. 22, p. 151-52. July, 1856.
 1857 *Bost. Soc. Nat. Hist. Proc.* v. 6, p. 73-83. 1857.
 Bibliography, p. 83.
 1860 Warren, E. *Life of J. C. W.* compiled chiefly from his autobiography . . .
 Bost. 1860. 2v.
 1881 *Memorial Hist. Boston.* 1881. v. 4, p. 519-20, port.
 1883 Arnold, H. P. J. C. W. (In *New England Hist. Genealog. Soc. Mem. Biog.*
 v. 3, p. 28-69. 1883)

WATERHOUSE, Benjamin. 1754-1846

- 1881 *Memorial Hist. Boston.* 1881. v. 4, p. 518.
 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 1200-2.

WATERHOUSE, John Fothergill. 1791-1817

- 1817 *Acad. Nat. Sc. Phila. Jour.* v. 1, pt. 1, p. 31-2. 1817.
 1899 Harshberger, John. B. F. W. (In his *Botanists of Phila.* 1899. p. 172-73)

WATSON, Gavin. 1795-1858

- 1859 *Gardener's Mthly.* v. 1, p. 1. 1859.
Bot. Soc. Edinburgh. Trans. v. 6, p. 159. 1859.
 1899 Harshberger, John. G. W. (In his *Botanists of Phila.* 1899. p. 246-47)

WEBSTER, John White. 1793-1850

- 1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 1209-11.

WEINLAND, Christoph David Friedrich. 1829-1914

1915 Falco. Halle, 1915. v. 11, p. 33-6.

WELLS, David Ames. 1828-1898

1909 Nat. Cycl. Amer. Biog. v. 10, p. 363-64, port. 1909.

WETHERILL, Charles Mayer. 1825-1871

1871 Amer. J. Sc. ser. 3, v. 1, p. 478-79. 1871.

WETHERILL, John Price. -1853

1859 Amer. Phil. Soc. Proc. v. 6, p. 14-6. 1859.

WHEATLAND, Henry. 1812-1893

1896 Amer. Acad. A. & Sc. Proc. 1896. v. 31, p. 363-67.

1898 Essex Inst. History. First half-century. Salem, 1898. p. 48-50.

WHEATLAND, Richard Henry.

1865 Bost. Soc. Nat. Hist. Proc. v. 10, p. 1-2. 1865.

WHEATLEY, Charles Moore. 1822-1882

1874 Biogr. Encycl. Pa., 19th century. 1874. p. 234-35.

1882 Amer. Nat. v. 16, p. 621. June, 1882.

1887 Fairchild, H. L. C. M. W. (In his Hist. N. Y. Acad. Sc. 1887. p. 92, port.)

1893 Pennypacker, C. H. C. M. W. (In Minerals. N. Y. v. 3, p. 150-51. 1893)

WHELPLEY, James Davenport. 1817-1872

1873 Amer. Acad. A. & Sc. Proc. v. 8, p. 482-84. 1873.

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1223.

WHITE, Charles Abiathar. 1826-1910

1885 Marcou, J. B. C. A. W.: Writings of . . . Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 115-81)

Biographical sketch, p. 115.

1910 Science. n. s. v. 32, p. 146-49. 1910.

1911 Stanton, T. W. Final supplement to the catalogue of the writings of C. A. W. . . . 1897-1908. (In U. S. Nat. Mus. Proc. v. 40, p. 197-99. 1911)

1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1223-24.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 496-97.

WHITFIELD, Robert Parr. 1822-1910

1885 Marcou, J. B. Writings of . . . B. B. W. Wash. 1885. (In U. S. Nat. Mus. Bull. no. 30, p. 259-72)

1910 Amer. Mus. Jour. v. 10, p. 118-21, port. 1910.

1911 Gratacap, L. P. B. P. W. (In N. Y. Acad. Sc. Annals. v. 20, no. 9, p. 385-98, port 1911)

Bibliography by L. Hussakof, p. 391-98.

Clarke, J. M. B. P. W. (In Geol. Soc. America. Bull. v. 22, p. 22-32. 1911)

Bibliography by L. Hussakof, p. 26-32.

WHITNEY, Josiah Dwight. 1819-1896

1896 Amer. J. Sc. ser. 4, v. 2, p. 312-13 1896.

1909 Brewster, E. T. Life and letters of J. D. W. N. Y. 1909. 13 + 411 p. 13 pl. 4 port.

Bibliography p. 387-400

WHITTLESEY, Charles. 1808-1886

- 1886 Amer. J. Sc. ser. 3, v. 32, p. 412, 487. 1886.
 1887 Baldwin, C. C. C. W. (In Mag. Western Hist. v. 5, p. 534-48, port. Feb. 1887)
 1889 Winchell, Alexander. C. W. (In Amer. Geol. v. 4, p. 257-68, port. 1889)

*WIED, MAXIMILIAN, Prince zu WIED NEU-. 1782-1867

- 1909 Pop. Sc. Mthly. v. 74, p. 50-2. Jan. 1909. (Spaulding)

WILDER, Burt Green. 1841-

- 1898 Nat. Cycl. Amer. Biog. v. 4, p. 481, port. 1898.

WILDER, Marshall Pinckney. 1798-1886

- 1915 Standard Cycl. Hort. ed. by L. H. Bailey. 1915. v. 3, p. 1603, port.

WILKES, Charles. 1798-1877

- 1877 Amer. Acad. A. & Sc. Proc. v. 12, p. 323-25. 1877.
 1893 Greely, A. W. C. W. (In his Explorers & travellers. N. Y. 1893. p. 194-211)

WILLEY, Henry. 1824-1907

- 1913 Bot. Gaz. v. 56, p. 502-3, port. Dec. 1913.
 1914 Fink, Bruce. H. W. . . . (In Mycologia. v. 6, no. 2, p. 49-53, port. March, 1914)
 Bibliography, p. 51-3.

WILLIAMS, Jonathan. 1750-1815

- 1901 Goode, G. B. J. W. (In U. S. Nat. Mus. Ann. Rept. 1897. pt. 2. Wash. 1901. p. 414-15)

WILSON, Alexander. 1766-1813

- 1814 Ord, George. A. W. Phila. 1814. (In Wilson, Alexander. American Ornithology. v. 9, p. 13-48)
 1825 Ord, George. Supplement to the American Ornithology of A. W., containing a sketch of the author's life . . . Phila. 1825.
 Biographical sketch of Wilson, p. 13-210.
 See also BIBLIOGRAPHY OF BOOKS: 1825: ORD.
 1834 Dunlap, William. A. W. (In his History of rise and progress of the arts of design in U. S. 1834. v. 2, p. 189-204)
 Repr. in 1918 ed., v. 2, p. 336-53.
 1856 Peabody, W. B. O. A. W. N. Y., 1856. (In Library of Amer. Biog., ed. by Jared Sparks. v. 2, p. 1-169)
 1876 Grosart, Alex. B. Memoir and literary remains of A. W., the American ornithologist . . . Paisley, A. Gardner, 1876. 2v. illus. pl. port.
 1890 Pop. Sc. Mthly. v. 36, p. 400-7, port. Jan. 1890.
 Repr. in Youmans, W. J. Pioneers of science in America. 1896. p. 90-9, port.
 1901 Faxon, Walter. Early editions of Wilson's "Ornithology." (In Auk. v. 18, p. 216-18. Apr. 1901)
 1905 Stone, Witmer. A. W. (In Bird-Lore. v. 7, p. 265-68, port. 1905)
 1906 Wilson, James Southall. A. W.; the poet-naturalist: a study of his life, with selected poems. N. Y. & Wash. Neale Pub. Co., 1906. 179 p.
 Bibliography of Biography and Bibliography, p. 151-54.
 1908 Burns, F. L. A. W.: in eight parts. (In Wilson Bull., Oberlin, Ohio. v. 20-22. 1908-10)

1. The Audubon controversy. v. 20, no. 1, p. 1-18, port. Mar. 1908.
 2. The mystery of the small-headed fly-catcher. v. 20, no. 2, p. 63-79. June, 1908.
 3. The unsuccessful lover. v. 20, no. 3, p. 130-45. Sept. 1908.
 4. The making of the "American Ornithology." v. 20, no. 4, p. 165-85. Dec. 1908.
 5. The completion of the "American Ornithology." v. 21, no. 1, p. 16-35. Mar. 1909.
 6. His nomenclature. v. 21, no. 3, p. 132-51. Sept. 1909.
 7. Biographies, portraits, and a bibliography of the various editions of his works. v. 21, no. 4, p. 16-35, 132-51, 165-86. 1909.
 8. His early life and writings. v. 22, no. 2, p. 79-96. June, 1910.
- 1910 Stone, Witmer. A. W. (In Jordan, D. S. Leading American men of science. 1910. p. 51-69)
- 1913 Stone, Witmer. Wilsoniana. (In Cassinia. v. 17, p. 1-5, port. 1913)

WILSON, Thomas Bellerby. 1807-1865

- 1865 Amer. J. Sc. ser. 2, v. 39, p. 373. May, 1865.---
Ent. Soc. Phila. 1865. 38 p.
- 1909 Stone, Witmer. T. B. W. (In Cassinia. v. 13, p. 1-6, port. 1909)

WINCHELL, Alexander. 1824-1891

- 1883 Bibliography of . . . Middletown, Conn., 1883. (In Wesleyan Univ. Alumni Record. 3rd ed. p. 659-66)
- 1891 Amer. J. Sc. ser. 3, v. 41, p. 337-38. 1891.
- 1892 Amer. Geol. v. 9, p. 71-148, 273-76, port. 1892.
Bibliography, p. 127-39, 273-76.
Geol. Soc. America. Bull. v. 3, p. 3-13. 1892. (By Winchell, N. H.)
Pop. Sc. Mthly. v. 41, p. 837-43, port. Oct. 1892.
- 1894 Geological writings of A. W. (In Geol. Soc. America. Bull. v. 5, p. 557-64. 1894)
- 1906 Merrill, G. P. A. W. (In U. S. Nat. Mus. Ann. Rept. 1904. Wash. 1906. p. 505-7, port.)

WINCHELL, Newton Horace. 1839-1914

- 1914 Science. n. s. v. 40, p. 127-30. July 24, 1914. (By J. M. Clarke)
- 1915 Upham, Warren. H. N. W. (In Geol. Soc. America. Bull. v. 26, p. 27-46, port. 1915)
Bibliography, p. 31-46.
- 1916 Upham, Warren. The work of N. H. W. in glacial geology and archaeology. (In Econ. Geol. v. 11, p. 63-72, port. 1916)

WING, Augustus. 1808-1876

- 1877 Dana, J. D. A. W. (In Amer. J. Sc. ser. 3, v. 13, p. 332-47, 405-19. 1877)
An account of the discoveries of A. W. in Vermont.
- 1901 Seeley, H. M. A. W. (In Amer. Geol. v. 28, p. 1-8, port. 1901)
- 1902 Seeley, H. M. A. W. (In Vermont. State Geol. Rept. 1901-2. Albany, 1902. p. 22-30, port.)

WINSLOW, Charles Frederick. 1811-1877

- 1877 Amer. J. Sc. ser. 3, v. 14, p. 168. 1877.

WINTHROP, John. 1587-1649

- 1901 Goode, G. B. J. W. (In U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, p. 375. 1901)

Repr. from Biol. Soc. Wash. Proc. v. 3, p. 60. 1886.

WINTHROP, John. 1606-1676

- 1901 Goode, G. B. J. W. (In U. S. Nat. Mus. Ann. Rept. for 1897. pt. 2, p. 375. 1901)

Repr. in Biol. Soc. Wash. Proc. v. 3, p. 60-1. 1886.

WISLIZENUS, Frederick Adolphus. 1810-1889

- 1892 Acad. Sc. St. Louis. Trans. v. 5, p. 464-68. 1892. (By George Engelmann)

- 1898 Pop. Sc. Mthly. v. 52, p. 643-44, port. Mar. 1898. (Starr)

- 1909 Pop. Sc. Mthly. v. 74, p. 244-46, port. March, 1909. (Spaulding)

WISTAR, Caspar. 1761-1818

- 1918 Tilghman, William. C. W. (In Amer. Phil. Soc. Trans. n. s. v. 1, p. 1-47. 1818)

- 1914 Kelly, H. A. C. W. (In his Some American medical botanists. Troy, N. Y., 1914. p. 82-7, port.)

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1248-50.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 519-21, port.

WISTAR, William Wynne. 1806-1898

- 1899 Harshberger, John. W. W. W. (In his Botanists of Phila. 1899. p. 196-97)

WITT, Christopher. 1675-1765

- 1899 Harshberger, John. C. W. (In his Botanists of Phila. 1899. p. 42-6.

- 1905 Amer. J. Pharmacy. v. 77, p. 311-23. July, 1905.

- 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1251.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 521.

WOLLE, Francis. 1817-1893

- 1899 Harshberger, John. F. W. (In his Botanists of Phila. 1899. p. 221-23, port.)

WOOD, Alphonso. 1810-1881

- 1881 Torrey Bot. Club. Bull. v. 8, p. 53-6. 1881.

- 1903 Bronx Borough *Record & Times*. Sunday, Apr. 19, 1903.

- 1908 Vermont Bot. Club. Bull. v. 3, p. 21-6. Apr. 1908.

WOOD, George Bacon. 1797-1879

- 1879 Amer. Nat. v. 13, p. 340-41. 1879.

- 1881 Littell, S. G. B. W. (In College of Physicians of Phila. Trans. ser. 3, v. 5, pref. p. 25-71. 1881)

- 1882 Hartshorne, Henry. G. B. W. (In Amer. Phil. Soc. Proc. v. 19, p. 118-52. 1882)

Ed. in 1880.

- 1899 Harshberger, John. G. B. W. (In his Botanists of Phila. 1899. p. 180-83)

WOOD, Horatio Charles, Jr. 1841-1920

1899 Harshberger, John. H. C. W., Jr. (In his *Botanists of Phila.* 1899. p. 316-19)

1900 Bibliographical record of H. C. W. *Phila.* 1900. 25 p.

WOOD, William. 1822-1885

1885 *Auk.* v. 2, p. 391. Oct. 1885.

WOODHOUSE, Samuel Washington. 1821-1903

1904 Stone, Witmer. S. W. W. (In *Cassinia.* v. 8, p. 1-5, port. 1904)

1905 ——— S. W. W. (In *Auk.* v. 22, p. 104-6. Jan. 1905)

WORTHEN, Amos Henry. 1813-1888

1888 Ulrich, E. O. A. H. W. (In *Amer. Geol.* v. 2, p. 114-17, port. 1888)

Dana, J. D. A. H. W. (In *Amer. J. Sc.* ser. 3, v. 36, p. 161-62. 1888)

1890 White, C. A. Sketch of the scientific work of A. H. W. (In *Geol. Surv. Illinois.* v. 8, appx. p. 18-37. 1890)

Bibliography, p. 20-36.

Bliss, N. W. Sketch of the life and personal and scientific character of A. H. W. (In *Geol. Surv. Illinois.* v. 8, appx. p. 7-17. July, 1890)

1895 White, C. A. A. H. W. (In *Nat. Acad. Sc. Biogr. Mem.* v. 3, p. 341-62. 1895)

Bibliography, p. 348-62; Rd. Nov. 1893.

WRAY, Richard S. -1889

1889 *Amer. Nat.* v. 23, p. 748. Aug. 1889.

WRIGHT, Charles. 1811-1885

1886 Gray, Asa. C. W. (In *Amer. J. Sc.* ser. 3, v. 31, p. 12-7. 1886)

1889 ——— C. W. (In his *Scientific Papers.* v. 2, p. 468-74. 1889)

WRIGHT, Chauncey. 1830-1875

1876 *Amer. Acad. A. & Sc. Proc.* v. 11, p. 350. 1876.

WRIGHT, John. 1811-1846

1920 Kelly & Burrage. *Amer. Med. Biog.* 1920. p. 1269.

Also in Kelly, H. A. *Cycl. Amer. Med. Biog.* 1912. v. 2, p. 532-33.

WURTZ, Henry. 1828-1910

1896 *Appleton's Cycl. Amer. Biog.* v. 6, p. 628-29. 1896.

WYETH, Nathaniel Jarvis. 1802-1856

1896 *Nat. Cycl. Amer. Biog.* v. 6, p. 73-4. 1896.

WYMAN, Jeffries. 1814-1874

1874 *Atlantic Mthly.* v. 34, p. 611-23. 1874.

Amer. J. Sc. ser. 3, v. 8, p. 323-24. 1874.

1875 *Bost. Soc. Nat. Hist. Proc.* v. 17, p. 95-6. 1875.

Gray, Asa. J. W. (In *Amer. J. Sc.* ser. 3, v. 9, p. 81-93, 171-77. 1875)

Amer. Acad. A. & Sc. Proc. v. 10, p. 496-505. 1875.

Bibliography, p. 501-5.

Gray, Asa. J. W. (In *Bost. Soc. Nat. Hist. Proc.* v. 17, p. 96-126. 1875)

Pop. Sc. Mthly. v. 6, p. 355-60. Jan. 1875 (By Wilder, B. G.)

- 1880 Bouve, T. T. J. W. (In Bost. Soc. Nat. Hist. Anniv. Mem. 1880. p. 169-77)
 1886 Packard, A. S. J. W. (In Nat. Acad. Sc. Biogr. Mem. v. 2, p. 75-126. 1886)

Bibliography, p. 118-26; Bd. Apr. 18, 1878.

- 1889 Gray, Asa. J. W. (In his Scientific Papers. v. 2, p. 377-400. 1889)
 1899 Benjamin, Marcus. J. W. (In Amer. Assoc. Adv. Sc. Proc. 1899. v. 48, p. 421-23, port.)
 _____ J. W. (In Science. n. s. v. 10, p. 674-75. Nov. 10, 1899)
 1910 Wilder, B. G. J. W. (In Jordan, D. S. Leading American men of science. 1910. p. 171-209)
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1271-74.
 Also in Kelly, H. A. Cycl. Amer. Med. Biog. v. 2, p. 534-38.

XANTUS, de VESEY, L. Johann

- 1861 Petermann's Mittheil. 1861. p. 133-43.

YANDELL, Lunsford Pitts. 1805-1878

- 1906 Nat. Cycl. Amer. Biog. v. 13, p. 210. 1906.
 1917 Ky. Med. Jour. v. 15, appx. p. 74-6, port. Nov. 1, 1917.
 1920 Kelly & Burrage. Amer. Med. Biog. 1920. p. 1278-79.

Also in Kelly, H. A. Cycl. Amer. Med. Biog. 1912. v. 2, p. 541-42.

YOUNG, Augustus. 1785-1857

- 1897 Nat. Cycl. Amer. Biog. v. 3, p. 506. 1897.

YOUNG, William, Jr. 1742-1785

- 1917 Harshberger, John. W. Y., Jr. (In Torrey. v. 17, no. 6, p. 91-9. June, 1917)

ZENTMAYER, Joseph. 1826-1888

- 1906 Nat. Cycl. Amer. Biog. v. 13, p. 215. 1906.

